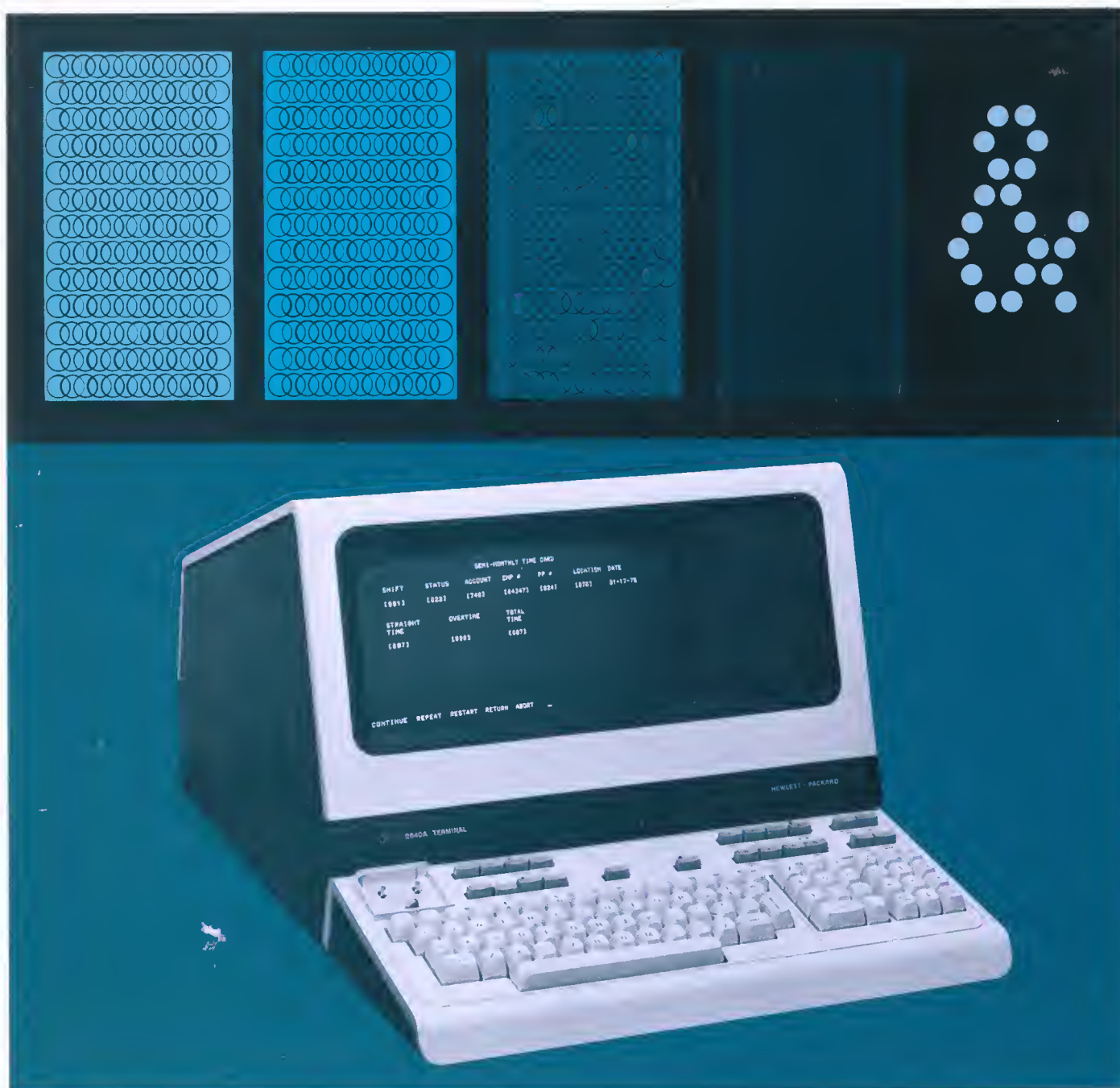


2640 Series Character Set Generation



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By Jean-Claude Roy

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I. INTRODUCTION

The purpose of this kit is to enable 264XX users to generate and breadboard their own custom alphanumeric and microvector character sets. The kit contains this application note, a 02640-60053 Prom Character Board assembly, and a 02640-60070 Connector Assembly.

An initial overview of the display will give the reader familiarity with the character generation procedure employed within the terminal. This will be followed by detailed instructions and aids in designing either an alphanumeric or microvector character set and its eventual translation into PROM bit patterns. The final result of the application of the information contained in this note will be a set of PROMs containing the desired custom character set. ROM masks can be subsequently generated from the dot pattern data if the required quantity of parts is large.

Appendices A and B contain reproducible originals of several forms which are useful in designing and implementing a character set. The use of these forms is strongly encouraged to keep the dot bookkeeping simple and accurate. Finally, listings are given of the 128-character Roman set, the 64-character Math Symbol set, and the 64-character Line Drawing Set. These can be used as guides and examples in the design of new, custom character sets.

II. 2640 SERIES DISPLAY FUNDAMENTALS

THE BASIC CHARACTER CELL

The 264XX utilizes a raster scan display having a capacity of 1920 characters. It is organized as 24 rows of 80 columns spanning a screen size of nominally 10" in width by 5" in height. The basic character cell which is common to all 1920 character positions is shown in Figure 2.1. It consists of a rectangle 9 dots wide by 15 scan lines high. The blinking cursor and underline feature overlay the character cell in scan lines 11 and 12 as is shown in Figure 2.2.

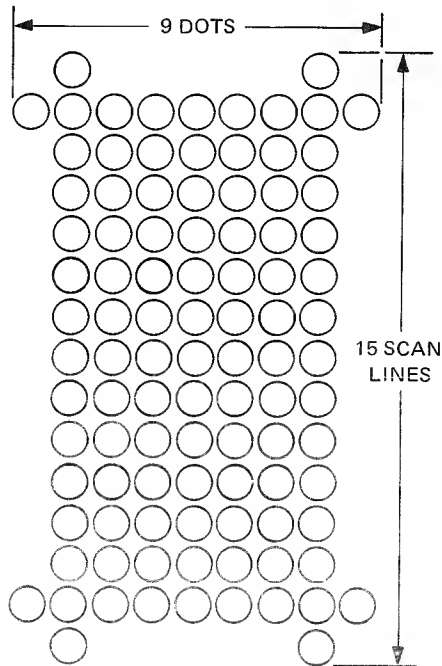


FIGURE 2.1
Basic Character Cell of 9 Dots x 15 Scan Lines With
Spacers Between Characters and Rows

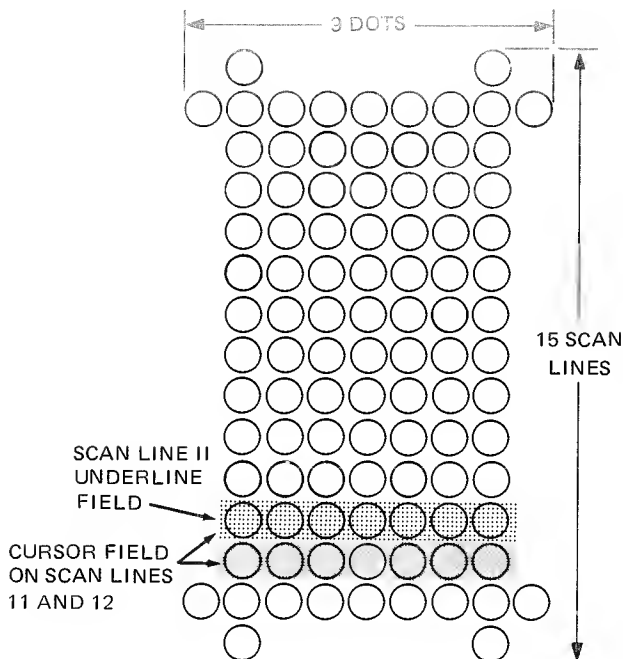


FIGURE 2.2
Basic Character Cell With Underline and Cursor Fields

TYPES OF CHARACTER SETS

Two types of character sets can be contained within the Terminal; alphanumeric sets and microvector sets. Alphanumeric sets are characterized by having a rectangle of 7 dots by 13 scan lines which are used for upper case, lower case, and control characters. Two of the dot columns, one on either side of the character, are used for horizontal character to character spacing. Similarly, two scan lines are used for vertical row to row spacing. These sets also utilize a resolution enhancing half-shift described below.

Microvector sets use the entire 9 dot by 15 scan line rectangle without the half-shift or spacer columns and scan lines. As a result, all of the encoded dots appear and the characters can be concatenated horizontally and vertically for contiguous lines. The primary purpose of the microvector sets is to generate special symbols and line segments for limited graphic display applications, forms, or histogram plots.

In practice, the horizontal line segments of characters are not visible as discrete dots but rather as line segments or bars. This results in greater light output and the elimination of horizontal discontinuities. The inherent graininess of a finite resolution dot matrix however, still remains. This is in part ameliorated by the use of the horizontal half-shift.

THE HALF-SHIFT AND CHARACTER ENHANCEMENT

Figure 2.3 illustrates a right parenthesis on a hypothetical 3x3 dot matrix. Due to the limited cell resolution the resulting character is very ragged.

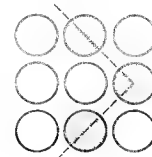


FIGURE 2.3
Ragged Right Parenthesis on Hypothetical
3x3 Dot Matrix

If the capability exists to utilize the horizontal interstitial two dots as shown in Figure 2.4, then a smoother parenthesis results.

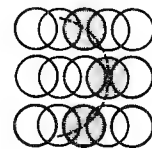


FIGURE 2.4
Smoother Right Parenthesis on Hypothetical 3x3 Dot Matrix
by Utilization of a Horizontal Dot Half-Shift

The 264XX has a half-shift as described above to achieve a pseudo-resolution expansion in the horizontal direction to 13 dots; 7 non-shifted dots and the interstitial 6 half-shifted dots. Figure 2.5 shows the final character cell which the 264XX uses for all alphanumeric characters. If vertically contiguous characters are desired, such as the components of a three row high integral sign, then dots may be coded in the normally vacant spacer scan lines 0 and 14.

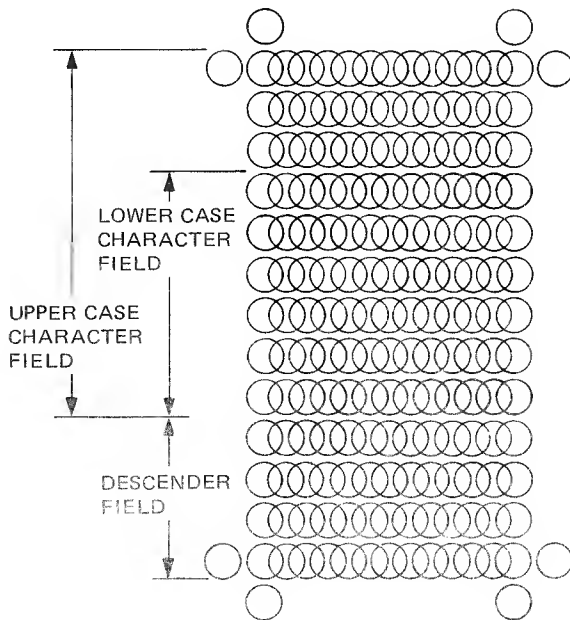


FIGURE 2.5
Basic Alphanumeric Character Cell with Six Interstitial
Dot Positions 1-1/2 thru 6-1/2, Horizontal and Vertical Spacing
and Descender, Upper Case, and Lower Case Character Fields

The dot patterns which form the characters are stored in ROMs. In a basic alphanumeric system one 8K bit ROM holds the 64 character upper case primary set, including the space character. The 128 character set option consists of a second 8K bit ROM and adds the control characters and the lower case primary set, along with the delete character. The primary set is that alphabet which is immediately available to the user when the terminal is first turned on. Microvector character sets are stored as 64 characters per 9K bit ROM with partitioning similar to alphanumeric sets.

THE DISPLAY ENHANCEMENT BOARD

The Display Enhancement Board (Product No. 13231A) increases the 264XX character set capacity to 512 characters. These additional characters are partitioned as three sets of 128 characters each with 64 per ROM. The six sockets on the board can be set up with combinations of 128 or 64 character sets configured as being of either the alphanumeric or microvector type. All of the sets are accessible by means of escape sequences and control codes.

The Prom Character Set printed circuit board has the capacity for two 128 character sets encoded in 4K PROMs each containing 32 alphanumeric characters. Four 4K PROMs are required to store a 128 character set. If the set is of the microvector type, a fifth PROM is also needed to store the ninth bit of dots.

When the board is connected to either the Display Control Board or the Display Enhancement Board it can replace either the Terminal's primary set or any two of the three available alternate sets respectively. The particular two sets are selected by means of two jumpers on the PROM Character Board. The alternate sets can be of either the alphanumeric or microvector type, depending on the jumper configuration at the enhancement board. Section VIII will describe the PROM Character Board and its use in more detail.

III. ALPHANUMERIC CHARACTER GENERATION

MEMORY ORGANIZATION

Alphanumeric characters may be stored in either ROMs or PROMs. In the former case 8K bit ROMs are used, each containing 64 characters and organized as 1K words of 8 bits each. Sixteen consecutive ROM words are used per character with the first 15 actually appearing on the screen. The sixteenth word is never accessed. The representation of characters in PROMs rather than ROMs is basically identical. The differences are that only 32 characters are stored in each 4K PROM and that they must be used with the PROM Character Board. Section V describes the partitioning of the ASCII Code for both ROMs and PROMs in detail.

The output word bits are numbered 0 through 7 with BIT 1 corresponding to the first non-spacer dot column of a character, BIT 2 to the second dot column, etc. The outputs are ground true so that when a particular word is addressed and an output line goes low, then that dot lights up on the screen.

BIT 0 serves as the half-shift control bit. When it is true, i.e., low, then bits 1 through 6 are half-shifted by one-half dot position to the right to positions 1-1/2 through 6-1/2 respectively. Bits 0 and 7 cannot be set simultaneously; that would result in a dot at position 7-1/2 which is outside the 7 by 13 character area.

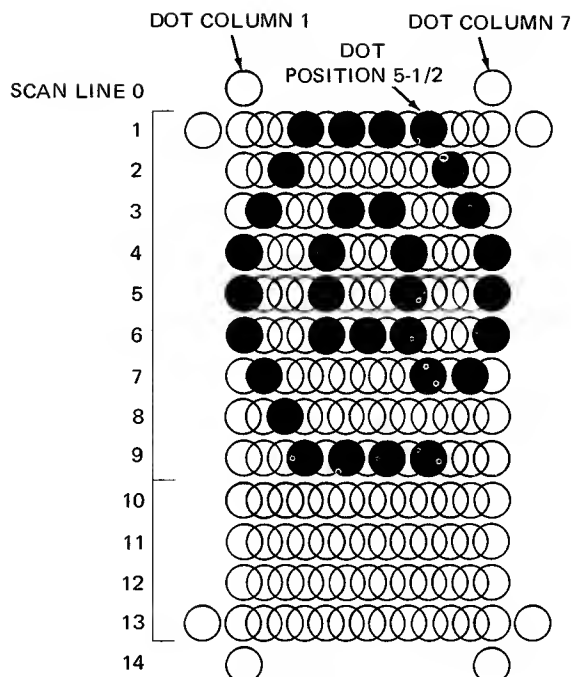


FIGURE 3.1a
An Upper Case Character Which Illustrates the Use
of the Half-Shift Algorithm

THE HALF-SHIFT ALGORITHM

Three simple rules can be stated in designing an alphanumeric character set employing the half-shift:

1. In any scan line segment any combination of dots 1 through 7 can be set without the half-shift (BIT 0 of the ROM word is high).
2. In any scan line segment any combination of dots 1-1/2 through 6-1/2 can be set with the half-shift (BIT 0 of the ROM word is low).
3. In any scan line segment BIT 0 and BIT 7 cannot be simultaneously set.

Figure 3.1a illustrates a character designed to these rules. Scan lines 1, 3, 7 and 9 are half-shifted while lines 2, 4, 5, 6 and 8 are not. Figure 3.1b is a representation of the same character as it is encoded in the character ROM or PROM.

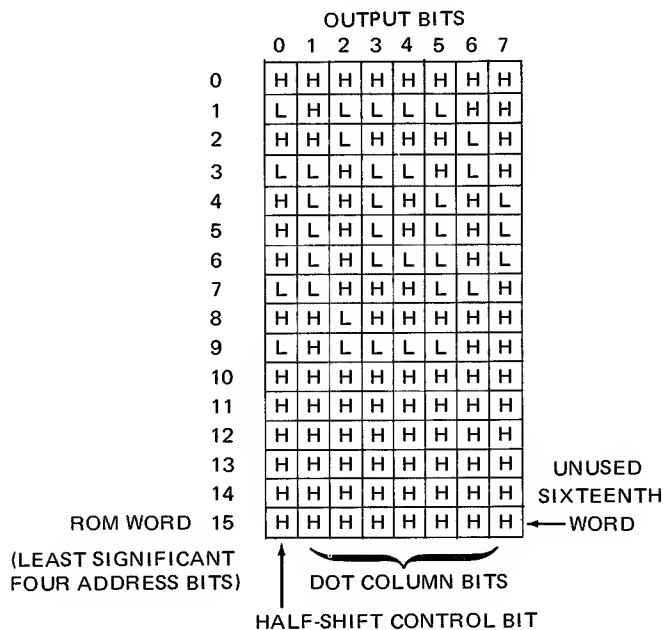


FIGURE 3.1b
Character ROM Encoding of the Same Character

IV. MICROVECTOR CHARACTER GENERATION

MEMORY ORGANIZATION

Microvector characters, like alphanumeric characters, may be stored in either ROMs or PROMs. In the former case 9K bit ROMs are used, each containing 64 characters and organized as 1K words of 9 bits each. Sixteen consecutive ROM words are used per character with the first 15 actually appearing on the screen. The sixteenth word is never accessed. The representation of microvector characters in PROMs rather than ROMs is only slightly different in its implementation; 32 microvector characters are stored in each 4K PROM and an additional PROM is multiplexed over the entire 128 character set to provide the ninth data bit. As with the alphanumeric character sets, these PROMs must be used with the PROM character Board. Section V describes the partitioning of the ASCII Code for both ROMs and PROMs in detail.

The output word bits are numbered 0 through 8 with BIT 0 corresponding to the extreme left dot position in the character cell. BIT 1 corresponds to the second dot position, etc. As with the alphanumeric character ROMs and PROMs, the outputs are ground true so that when a particular word is addressed and an output line goes low, then that dot lights up on the screen.

MICROVECTOR DOT MATRIX

All 9 dots by 15 scan lines of the character cell are encoded within the Microvector character ROMs or PROMs. This gives the designer the freedom to generate any desired combination of vertically and/or horizontally contiguous characters within the 9x15 cell matrix. Larger characters can be formed by clustering several characters together to make a larger dot matrix.

Figure 4.1 illustrates a microvector character from the Line Drawing Set (See Appendix G) and its representation in ROM.

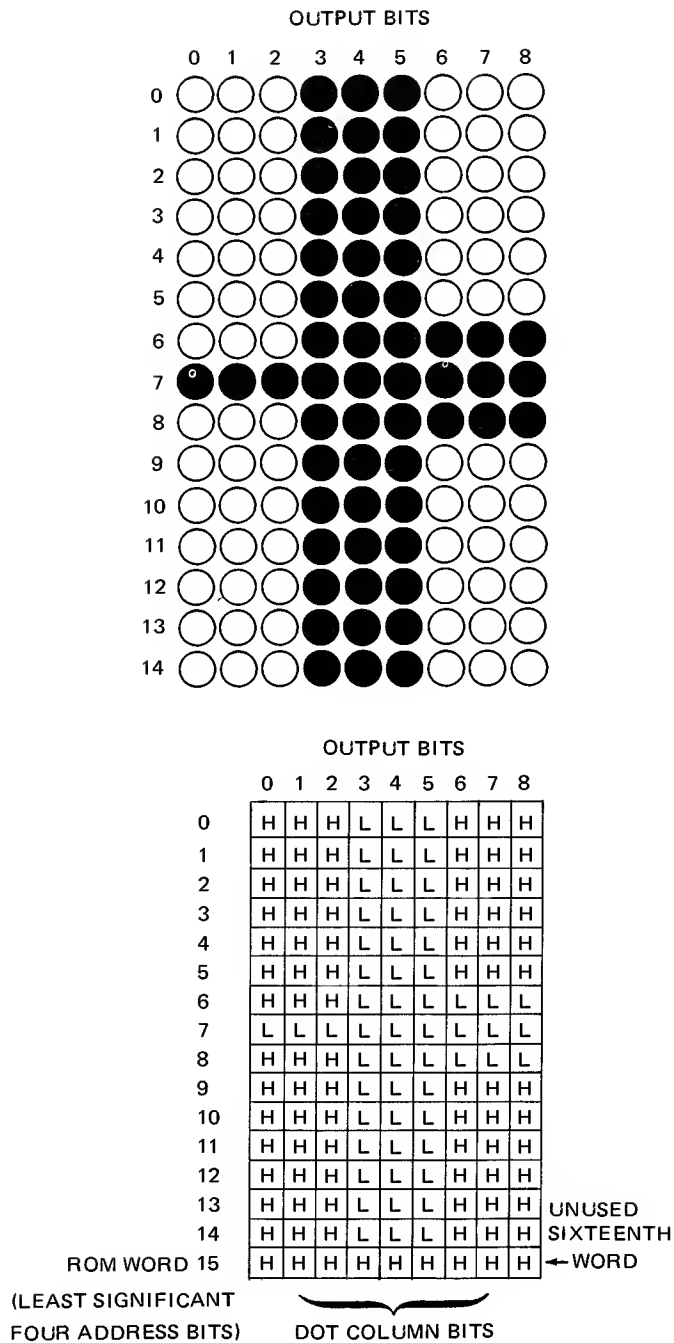


FIGURE 4.1
A representative Microvector Character and its Coding in ROM

V. THE ASCII CODE AND THE 264XX

This section will cover three areas of importance in the generation of a new character set. The first topic will deal with the partitioning of the 7-bit ASCII code within the 264XX into upper case, lower case, and control characters, both in ROM and PROM. Reference will then be made to those areas of the ASCII chart wherein expansion to alternate character sets is possible. Finally the mapping procedure from the keyboard to the ASCII chart will be covered.

Armed with this information the user can then answer the following fundamental questions before beginning a character set: 1) How many characters must be designed? 2) How many PROMs or ROMs will be needed to implement the set?, and 3) Where will the characters appear on the keyboard?

ASCII CODE PARTITIONING WITHIN THE 264XX

The 264XX partitions the 7-bit ASCII code into three categories; 64 upper case symbols, 32 lower case symbols, and 32 control codes. See Figure 5-1, taken from the standard ANSI code (ANS X3.4-1968). In the basic system only the 64 upper case ROM symbols are displayable; all lower case ROM symbols automatically become shifted to their upper case representations and control codes are stripped out. With the addition of the 128 character set option, all characters become displayable, including the control codes when in the Display Function mode.

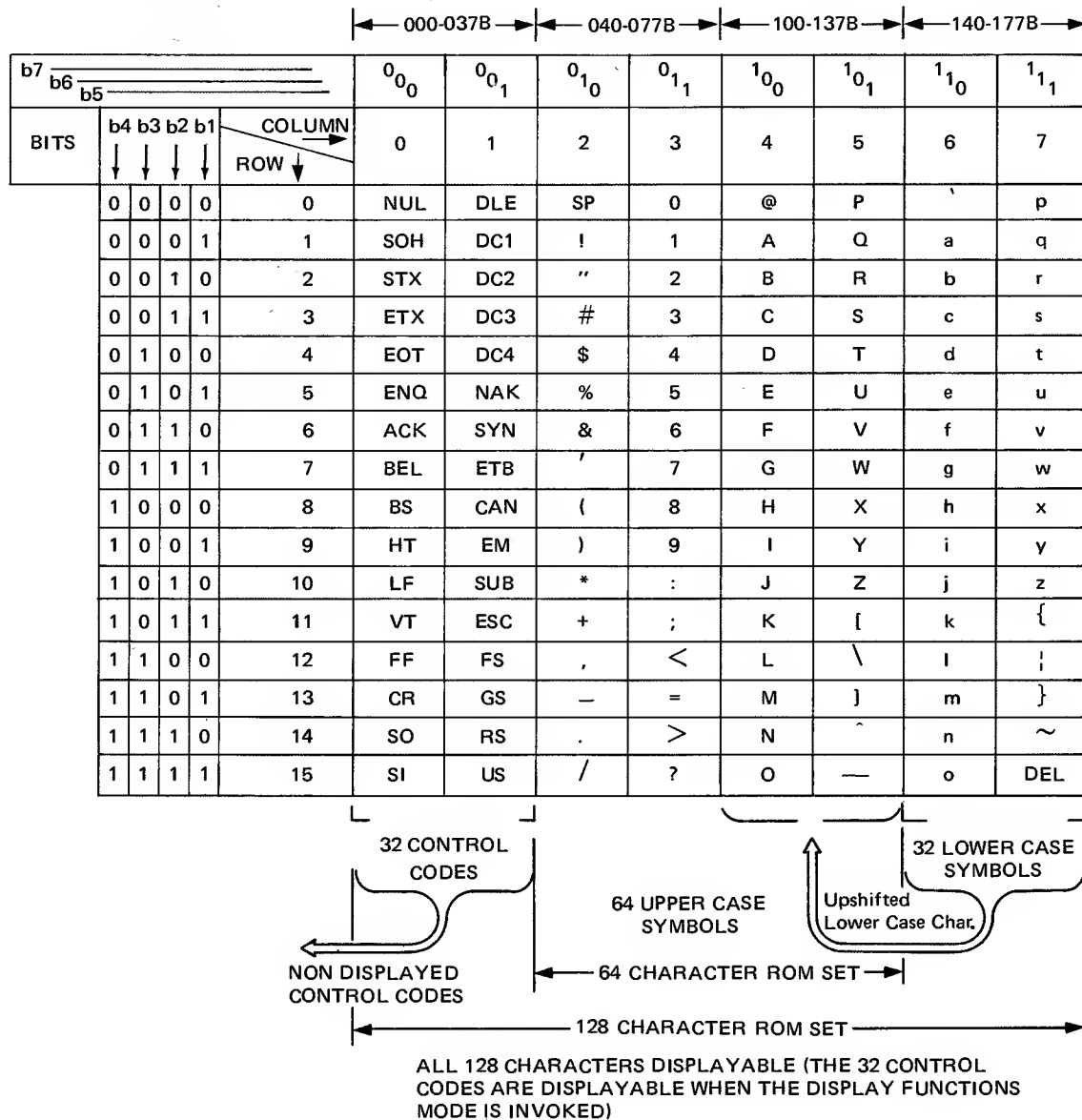


FIGURE 5.1
Partitioning of the 7 Bit ASCII Code With
a 64 and a 128 Character Set in ROM.

The upper case ROM stores the 64 upper case symbols (040-137B) while the lower case ROM stores the 32 control codes (000-037B) and the 32 lower case symbols (140-177B). Figure 5.2 illustrates the character ordering within the ROMs. When a 128 character set is stored in PROMs,

then the character partitioning is as shown in Figure 5.3. Each holds the 32 consecutive characters contained in one half of a character ROM. PROM sets are always treated as containing 128 characters; there is no upshifting of lower case symbols to their upper case representation.

UPPER CASE ROM 040-137B (SP- _)	0	SP	16	0	32	@	48	P
	1	!	17	1	33	A	49	Q
	2	"	18	2	34	B	50	R
	3	#	19	3	35	C	51	S
	4	\$	20	4	36	D	52	T
	5	%	21	5	37	E	53	U
	6	&	22	6	38	F	54	V
	7	'	23	7	39	G	55	W
	8	(	24	8	40	H	56	X
	9	)	25	9	41	I	57	Y
	10	*	26	:	42	J	58	Z
	11	+	27	;	43	K	59	[
	12	,	28	<	44	L	60	\
	13	-	29	=	45	M	61]
	14	.	30	>	46	N	62	^
	15	/	31	?	47	O	63	_

LOWER CASE ROM 000-037B, 140-177B	0	NUL	16	DLE	32	`	48	p
	1	SOH	17	DC1	33	a	49	q
	2	STX	18	DC2	34	b	50	r
	3	ETX	19	DC3	35	c	51	s
	4	EOT	20	DC4	36	d	52	t
	5	ENQ	21	NAK	37	e	53	u
	6	ACK	22	SYN	38	f	54	v
	7	BEL	23	ETB	39	g	55	w
	8	BS	24	CAN	40	h	56	x
	9	HT	25	EM	41	i	57	y
	10	LF	26	SUB	42	j	58	z
	11	VT	27	ESC	43	k	59	{
	12	FF	28	FS	44	l	60	|
	13	CR	29	GS	45	m	61	}
	14	SO	30	RS	46	n	62	~
	15	SI	31	US	47	o	63	DEL

($N_U - U_S$, ` - DEL)

FIGURE 5.2
Character Ordering Within the Upper Case
64 Character ROM & the Lower Case 64 Character ROM

0	NUL	16	DLE
1	SOH	17	DC1
2	STX	18	DC2
3	ETX	19	DC3
4	EOT	20	DC4
5	ENQ	21	NAK
6	ACK	22	SYN
7	BEL	23	ETB
8	BS	24	CAN
9	HT	25	EM
10	LF	26	SUB
11	VT	27	ESC
12	FF	28	FS
13	CR	29	GS
14	SO	30	RS
15	SI	31	US

000-037B ($N_U - U_S$)

0	SP	16	0
1	!	17	1
2	"	18	2
3	#	19	3
4	\$	20	4
5	%	21	5
6	&	22	6
7	'	23	7
8	(	24	8
9	)	25	9
10	*	26	:
11	+	27	;
12	,	28	<
13	-	29	=
14	.	30	>
15	/	31	?

040-077B (SP- ?)

0	@	16	P
1	A	17	Q
2	B	18	R
3	C	19	S
4	D	20	T
5	E	21	U
6	F	22	V
7	G	23	W
8	H	24	X
9	I	25	Y
10	J	26	Z
11	K	27	[
12	L	28	\
13	M	29]
14	N	30	^
15	O	31	_

100-137B (@ - _)

0	`	16	p
1	a	17	q
2	b	18	r
3	c	19	s
4	d	20	t
5	e	21	u
6	f	22	v
7	g	23	w
8	h	24	x
9	i	25	y
10	j	26	z
11	k	27	{
12	l	28	|
13	m	29	}
14	n	30	~
15	o	31	DEL

140-177B (` - DEL)

FIGURE 5.3
PROM Partitioning for 128 Characters

ANSI CODE EXTENSION

The proposed ANSI code extension (ANSI X3.4, 1968) partitions the 7-bit ASCII code into the following four groups: 1) a set of 32 control codes; 2) a set of 94 graphic characters comprising the upper case and lower case symbols; 3) the space character; and 4) the delete character. See Figure 5.4.

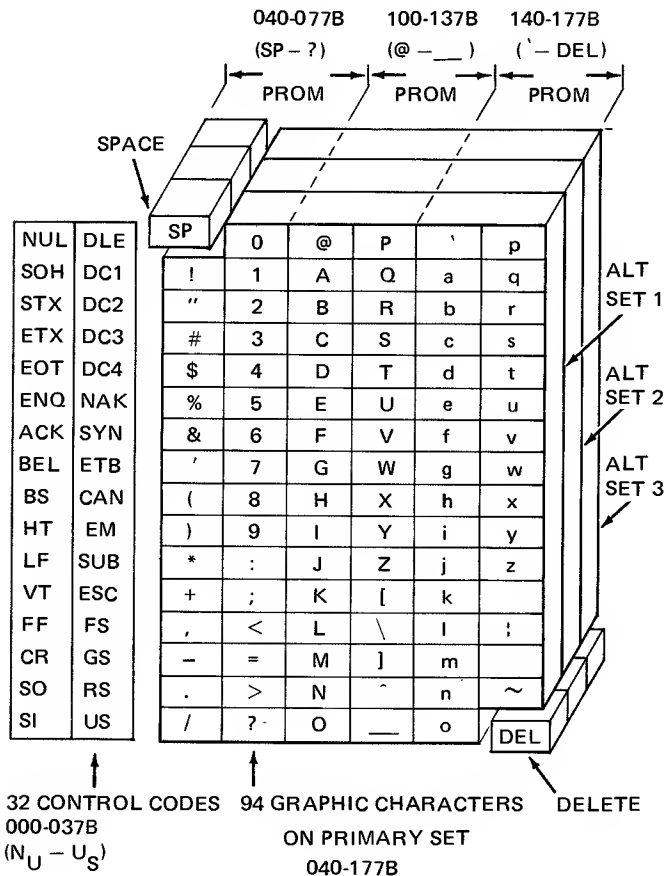


FIGURE 5.4
ANSI Partitioning of the 7 Bit ASCII Code
Also Shown Are Three Alternate 94 Character Graphic Sets

It is in the better interest of the user to not attempt to redefine the 32 control characters inasmuch as most of them are utilized by the 264XX. Similarly, the space and delete characters are already designated by convention for all graphic sets and must not be reassigned. This leaves the 94 graphic symbols of which 63 are in the upper case set (along with the space) and 32 are in the lower case set (including delete).

Figure 5.4 also illustrates the three alternate character sets which can reside within the terminal. Each set consists of 94 graphic characters, space, delete, and the original 32 control characters. For many applications alternate sets limited to 64 alphanumeric characters will suffice; these can be implemented in two 4K PROMs appearing together as an upper case set. If a ROM implementation is required later, then a single 8K ROM can contain the 64 characters.

Alphanumeric sets requiring 96 characters need three 4K PROMs for their implementation. In most cases the 32 control codes need not be replicated in the alternate sets since they are carried in the base set. If ROMs are used, however, the residual 32 characters of the lower case ROM would contain them anyway.

Microvector sets follow partitioning similar to alphanumeric sets. Only two differences need be noted. First, one PROM containing the ninth dot column must be used independent of the size of the alternate set. Secondly, ROM implementations utilize a 9K ROM to store 64 characters. The coding of both alphanumeric and microvector PROM sets will be covered in more detail in Section VII.

KEYBOARD ASSIGNMENTS

With the simple addition of PROM or ROM alternate sets the keycap-to-displayed character assignment does not change; to do so would entail firmware changes within the 264XX. All custom characters will then map with a one-to-one correspondence between the physical keys on the keyboard and the character's position on the ASCII chart. The basic Roman character set as defined by ANSI X3.4, 1968 should be used to locate a new character's ASCII chart location given its desired keyboard address.

For example, the "@" key may be assigned a new arbitrary symbol in some custom character set. To invoke that symbol requires that it be stored as the 33rd character of an upper case set, or at 100B.

It is advantageous when designing a new custom character set to first decide upon the keyboard assignment of the characters themselves. Such questions as how many characters are needed and where to place them on the keyboard must be answered. Having done this then leads immediately to the order in which the characters must be packed within the PROMs. The last step is the detailed design of the individual characters themselves; coding them into the PROM format, and getting the PROMs programmed.

VI. HINTS AND TIPS ON CHARACTER DESIGN

The design of a character set is more an art than a science; as such, aesthetics and human judgment predominate during the design and layout. This is especially true in the design of a foreign language alphabet. A person undertaking this task should, ideally, have at least a reading knowledge of the language to insure an accurate rendering of subtle character details. With this consideration in mind, though, some general tips can still be enumerated which can help the user wade through the morass of judgment and compromise needed to realize a working character set.

UNIFORMITY OF CHARACTER STYLE

The character style and symbol complexity are strong functions of the language being designed. Some languages will be difficult, while others will be fairly easy to reproduce in a dot matrix format.

Character representation variations such as varying line weights or slants may not be possible in many languages; if the symbols are complex, then heavy or slanted characters may exceed the width of the character cell. Similarly, the rigid format of a dot matrix makes most ornate variations difficult or impossible. Italic or script fonts may exceed the character cell on some characters. If, in spite of this, such a set is designed anyway with some characters not embellished, then the overall uniformity of the set is destroyed. The net effect is somewhat unpleasant and distasteful to the eye. The decision to use serifs on the characters also falls into this category. If they are used at all, they must be used everywhere to generate a uniformly harmonious set.

HORIZONTAL CENTERING

Another aspect of uniformity in character design is that all characters be centered within their respective cells. It is advantageous from an esthetic standpoint to spend a moment checking a character's centering after designing it. If it is an integral number of dots in width then centering can be done exactly via the half-shift. Otherwise the character can only be centered to within half a dot. Figure 6.1 illustrates an off-center character and a recentered version.

LOWER CASE CHARACTER HEIGHT

Lower case characters may be either 5 or 6 scan lines in height. The only advantage of using 5 lines is that a center line now exists. This advantage is offset by the more important consideration of lower legibility due to a smaller character. A 6 scan line high lower case character is strongly recommended in that the 20% increase in height more than compensates for the loss of the center line and yields a more legible character. Lower case descenders should utilize the entire field provided from scan lines 10 through 13.

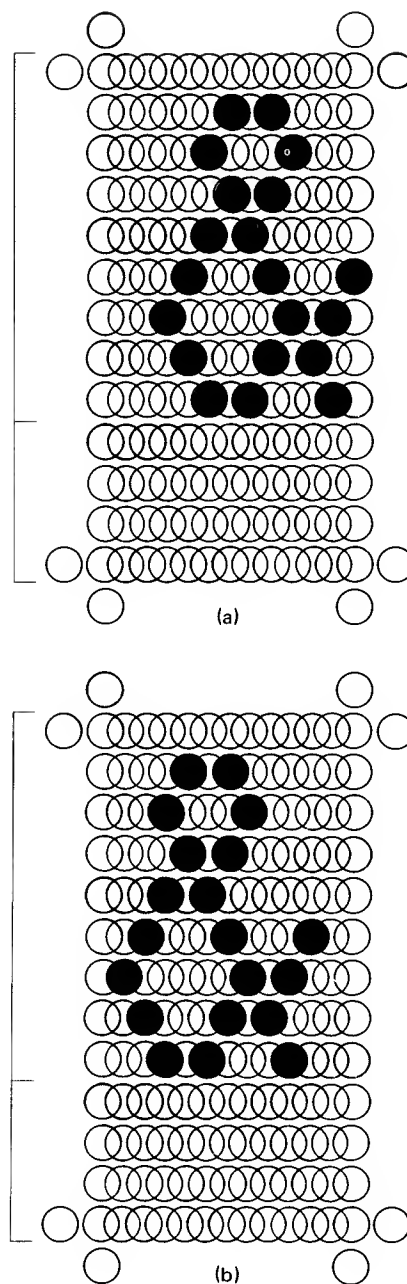


FIGURE 6.1
Illustrations of (a) Off-Center Character, and
(b) the Same Character Recentered to Within One Half Dot
of True Center

TWO CHARACTER MNEMONICS

Special two character mnemonics can easily be coded within the 264XX character font. Several examples taken from the ASCII Control Codes are shown in Figure 6.2. Similar special characters can easily be generated by overlapping two miniature 4x5 characters one dot horizontally and one scan line vertically. This results in concatenated characters which are still legible yet can easily denote special symbols or functions.

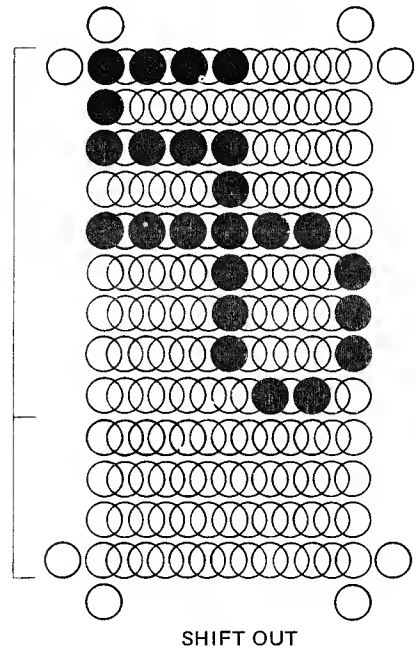
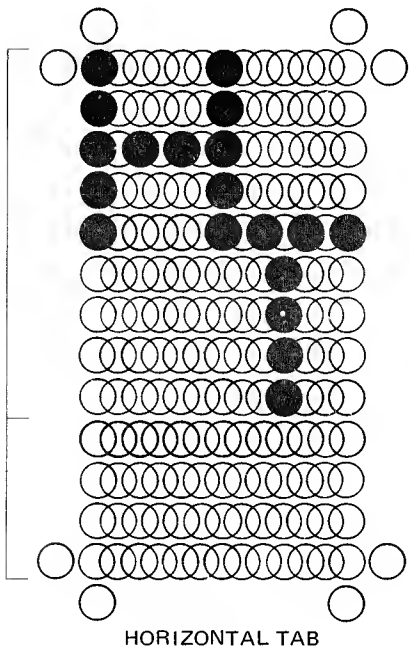
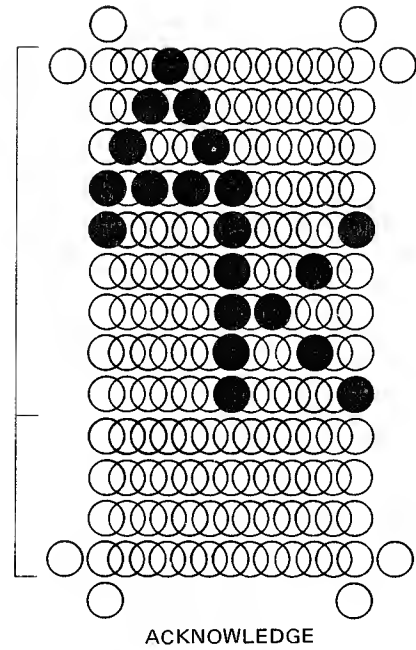
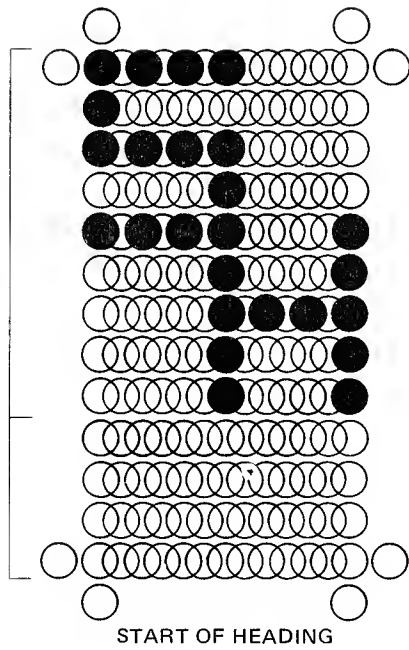


FIGURE 6.2
Examples of Two Character Mnemonics
Taken From ASCII Control Codes

VERTICALLY CONTIGUOUS CHARACTERS

Some special alphanumeric character sets require that vertical character segments span across row boundaries. An example of this is the three segment integral sign found in the Math Symbol set (Figure 6.3). Such characters can be generated by encoding dots in the normally blank scan lines 0 and 14. When the characters are vertically butted then continuous vertical segments are formed.

CHARACTER BRIGHTNESS UNIFORMITY

One characteristic of the dot matrix which must be considered when designing characters is that diagonal segments may appear dimmer than horizontal or vertical segments. This is because the center-to-center spacing of dots on the diagonals is either 1.414 or 1.118 times the vertical spacing for non-half-shifted and half-shifted diagonals respectively.

The effect may be minimized to some extent by attempting to design out long diagonal segments intersecting horizontal or vertical segments. It is also sometimes useful to use a half-shift diagonal in place of a non-shifted diagonal since the former has the greater dot density.

Some characters, by virtue of their intrinsic shapes, have appendages which will not appear bright with respect to the bulk of the character. For example, the dot over the lower case 'i' or the dot under the exclamation point. These characters can be improved by using a cluster of three or four dots; this results in a spot which appears to be equal in brightness with the rest of the character.

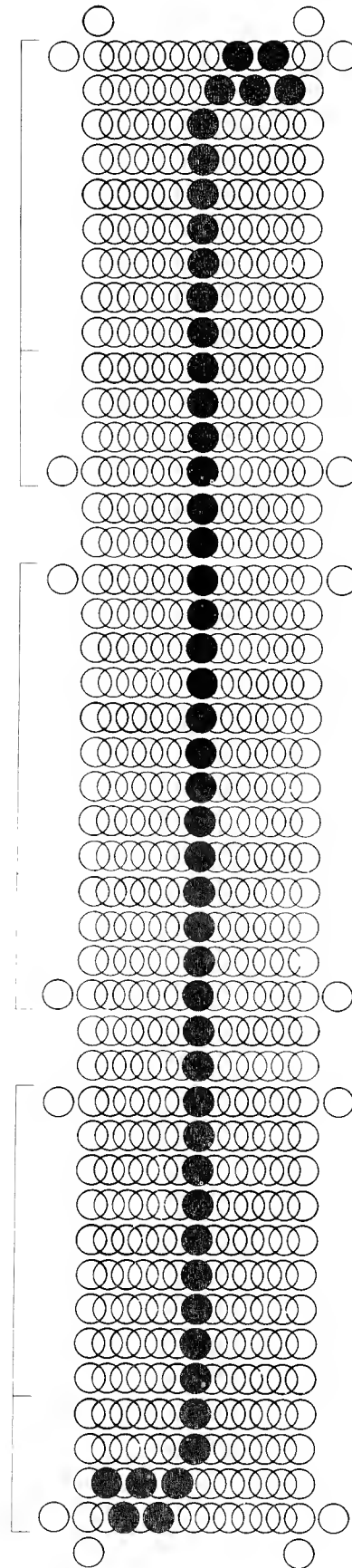


FIGURE 6.3
Three Segment Integral Sign Showing Vertical Contiguity

VII. ENCODING CHARACTERS IN PROM

This section will deal with the actual mechanics of generating character data in a format suitable for conversion to PROMs, beginning with the dot matrix and finishing with PROM data.

USE OF THE CHARACTER MATRIX WORKSHEET

Appendices A and B contain dot matrix worksheets to simplify the generation of alphanumeric and microvector characters respectively. Figure 7.1a illustrates a hypothetical alphanumeric character designed in accordance with the conventions described in Section VI. In addition, by way of example, it is desired that this character be invoked by means of the upper case "p" key on the keyboard.

Figure 7.1b shows the same character as it must be encoded as bits in a PROM. The half-shifted dots in scan lines 2, 4, 6, 8 and 10 are now represented as combinations of the half-shift control bit and the unshifted dot bits.

Similarly, Figure 7.2a illustrates a hypothetical microvector character to be invoked by means of the lower case "q". Figure 7.2b is the same character translated into bit format for two PROMs, the first holding dots 0 thru 7, and the second holding the eighth dot. (The rationale for assigning the dot 8 data to BIT 3 of the second PROM will be discussed below.)

RECOMMENDED PROM VENDORS AND THEIR DATA FORMATS

Two vendors are recommended as possible suppliers of 4096 bit (512 word x 8 bit) Bipolar PROMs suitable for use in the 02640-60053 printed circuit assembly. These are the following:

Monolithic Memories, Inc., Model 6340
1165 E. Arques Avenue
Sunnyvale, CA 94086

Intel Cororation, Model 3604
3065 Bowers Avenue
Santa Clara, CA 95051

Both Intel and MMI prefer to receive the PROM data in ASCII paper tape format. It is still in the better interest of the user to verify the preferred data format with their local manufacturer's representative before encoding the data. Appendices C and D list the data formats for MMI and Intel PROMs respectively. Both are very similar except for the use of H and L by MMI and P and N by Intel to represent the absence and presence of dots.

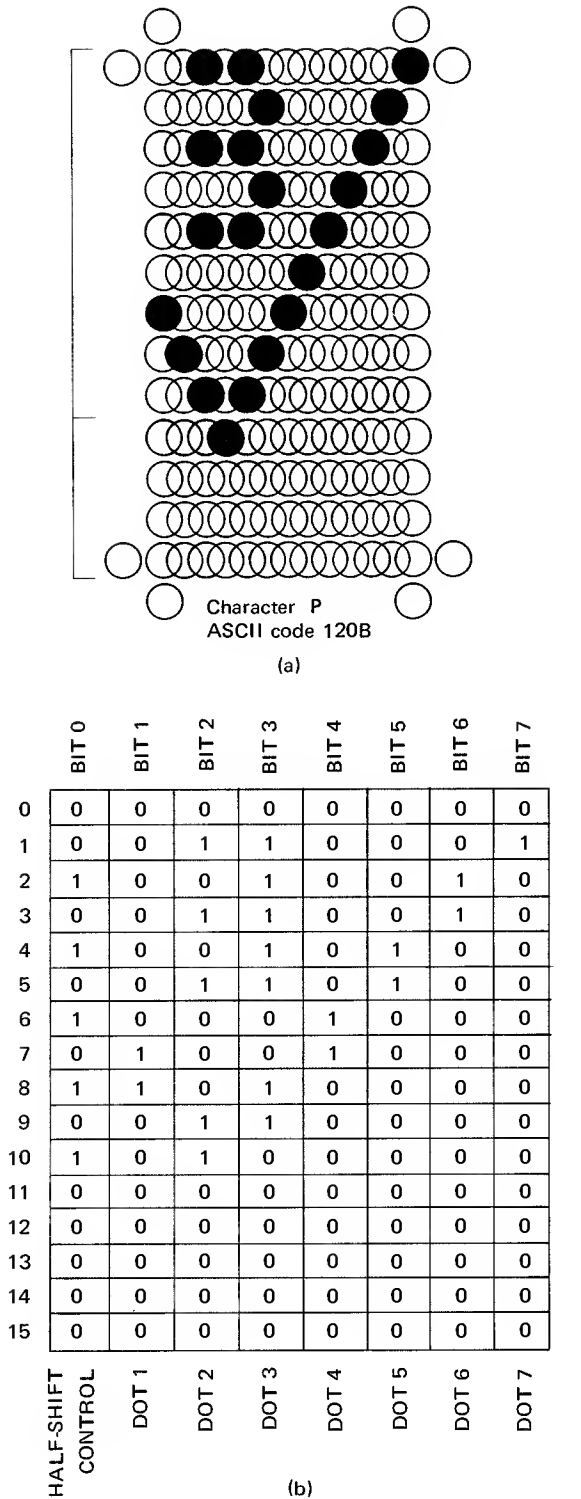


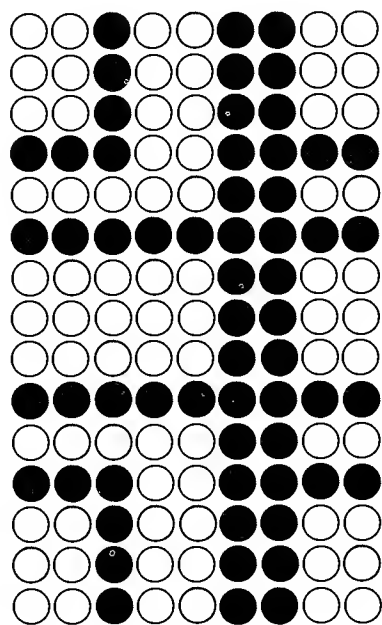
FIGURE 7.1
(a) Hypothetical Alphanumeric Character as Designed on the Alphanumeric Dot Matrix Worksheet
(b) The Same Character as Represented in Bit Format

ENCODING ALPHANUMERIC CHARACTERS IN PROM

Once the alphanumeric characters are both defined in bit format and assigned a position on the ASCII chart, it is a straightforward process to encode the bits into the PROM format. Each character requires 16 consecutive words starting with word 0. The first character occupies words 0-15, the second 16-31, etc. The example of Figure 7.1 is to

be placed as the seventeenth character of the PROM containing the ASCII codes 100-137B. Hence, it would be encoded as words 256-271 of that PROM.

Figure 7.3 illustrates the same character in both MMI and Intel 4K PROM format. Note that the PROMs require the data to be encoded starting with the most significant bit whereas the half-shift control bit, BIT 0, is the least significant bit. A listing of the contents of a PROM then appears as the mirror image of the bit representation of characters (such as Figure 7.1b).



Character q
ASCII Code 161B

(a)

	BIT 0	BIT 1	BIT 2	BIT 3	BIT 4	BIT 5	BIT 6	BIT 7	BIT 3
0	0	0	1	0	0	1	1	0	0
1	0	0	1	0	0	1	1	0	0
2	0	0	1	0	0	1	1	0	0
3	1	1	1	0	0	1	1	1	1
4	0	0	0	0	0	1	1	0	0
5	1	1	1	1	1	1	1	1	1
6	0	0	0	0	0	1	1	0	0
7	0	0	0	0	0	1	1	0	0
8	0	0	0	0	0	1	1	0	0
9	1	1	1	1	1	1	1	1	1
10	0	0	0	0	0	1	1	0	0
11	1	1	1	0	0	1	1	1	1
12	0	0	1	0	0	1	1	0	0
13	0	0	1	0	0	1	1	0	0
14	0	0	1	0	0	1	1	0	0
15	0	0	0	0	0	0	0	0	0
	DOT 0	DOT 1	DOT 2	DOT 3	DOT 4	DOT 5	DOT 6	DOT 7	DOT 8

(b)

FIGURE 7.2

(a) Hypothetical Microvector Character as Designed
on the Microvector Dot Matrix Worksheet

The Character is to be Invoked by Means of the "q" Key (161B)

(b) The Same Character as Represented in Bit Format;
Dots 0-7 are Contained in the First of the Two Microvector
PROMs While Dot 8 is Stored as BIT3 of the Second PROM.

	BIT 7	BIT 0	
256-259	BHHHHHHHFF	BLHHHLLHHF	BHLHHLHHLF BHLHHLHHFF
260-263	BHHLHLHHLF	BHHLHLLHHF	BHHHLHHHLF BHHHLHHHLF
264-267	BHHHHLHLLF	BHHHLLHHF	BHHHHLHLLF BHHHHLHLLF
268-271	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF BHHHHHHHFF

(a)

256-259	BPPPPPPPF	BNPPPNPPF	BNPPPNPPF	BNPPPNPPF
260-263	BPPNPNNPF	BPPNPNNPF	BPPNPNNPF	BPPNPNNPF
264-267	BPPPPNNPF	BPPPPNNPF	BPPPPNNPF	BPPPPNNPF
268-271	BPPPPPPPF	BPPPPPPPF	BPPPPPPPF	BPPPPPPPF

(b)

FIGURE 7.3

(a) Hypothetical Alphanumeric Character of Figure 7.1 as Encoded
in an MMI 4K PROM

The Character is to be Invoked by Means of the "P" Key

(b) The Same Character as Encoded in an Intel 4K PROM

ENCODING MICROVECTOR CHARACTERS IN PROM

The translation process for converting microvector characters in bit format to PROM format is essentially the same as for alphanumeric characters with regard to dots 0-7. Dot 8 of microvector characters must be encoded as one bit position of a second PROM, the Microvector Bit 8 PROM. Table 7.1 tabulates which bit of the Microvector Bit 8 PROM must be used for each 32 character PROM in the set.

Each word of this PROM is multiplexed over the four PROMs which can hold a complete 128 character set; the least significant four output bits (0-3) correspond to the eighth microvector dot in each of the 32 characters per quadrant of the complete set. As many bit columns of the microvector Bit 8 PROM will then be used as there are 32 character PROMs in the set.

Table 7.1 can be used to verify that the example character of Figure 7.2 would use the BIT 3 column of the Microvector Bit 8 PROM. Figure 7.4 illustrates the coding of the bit format of the example in both MMI and Intel 4K PROM format. Since the character is to appear as a lower case "q", then it would occupy words 272-287 of both PROMs.

DATA BIT USED FOR MICROVECTOR BIT 8				
CHARACTER SET PROM	BIT 0	BIT 1	BIT 2	BIT 3
000-037B (N _U - U _S)	X			
040-077B (SP - ?)		X		
100-137B (@ - _)			X	
140-177B (` - DEL)				X

TABLE 7.1
Microvector Bit 8 Assignment

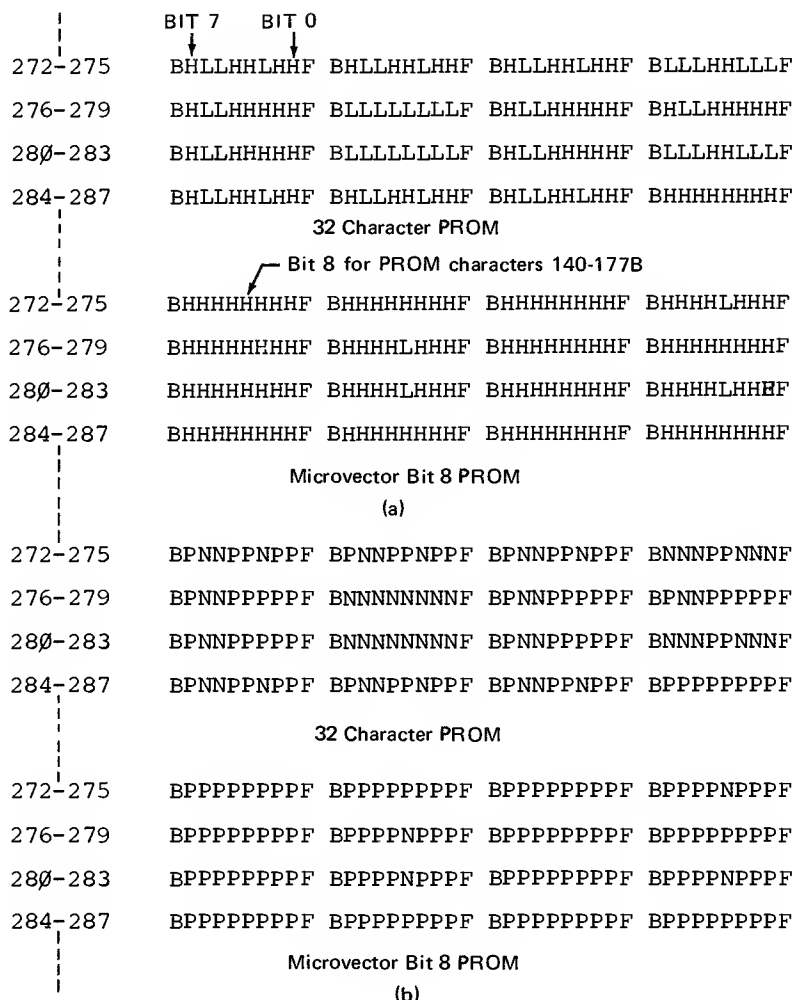


FIGURE 7.4
(a) Hypothetical Microvector Character of Figure 7.2
as Encoded in an MMI 4K PROM
The Character is to be invoked by Means of the "q" Key
The Microvector Bit 8 PROM Contents are Also Shown
(b) The Same Character as Encoded in Intel 4K PROMs

VIII. USE OF THE PROM CHARACTER BOARD

There are two configurations for the PROM Character Board. These are the replacement with custom PROM character sets of either the primary character set (SET0) or any one or two of the three available alternate sets, SET1, SET2, or SET3.

REPLACEMENT OF THE PRIMARY SET

The primary character set may be replaced with a custom alphanumeric PROM set up to 128 characters in length. Figure 8.1a illustrates the jumper configuration and PROM sockets used for this purpose. An upper case set of 64 characters, by way of example, would occupy sockets

XU12 (040-077B) and XU13 (100-137B). The existing primary character set in ROM on the Display Control Board must be removed before attempting to replace the set with a PROM version. Also, the jumpers on the Display Control Board and the PROM Character Board must be configured as shown in Table 8.1.

The PROM Character Board is plugged into the 264XX backplane adjacent to the Display Control Board as is shown in Figure 8.1b. The two boards are connected together with the Connector Assembly (02640-60070) provided. Note that the correct orientation of the connector is with the handle in a downward position.

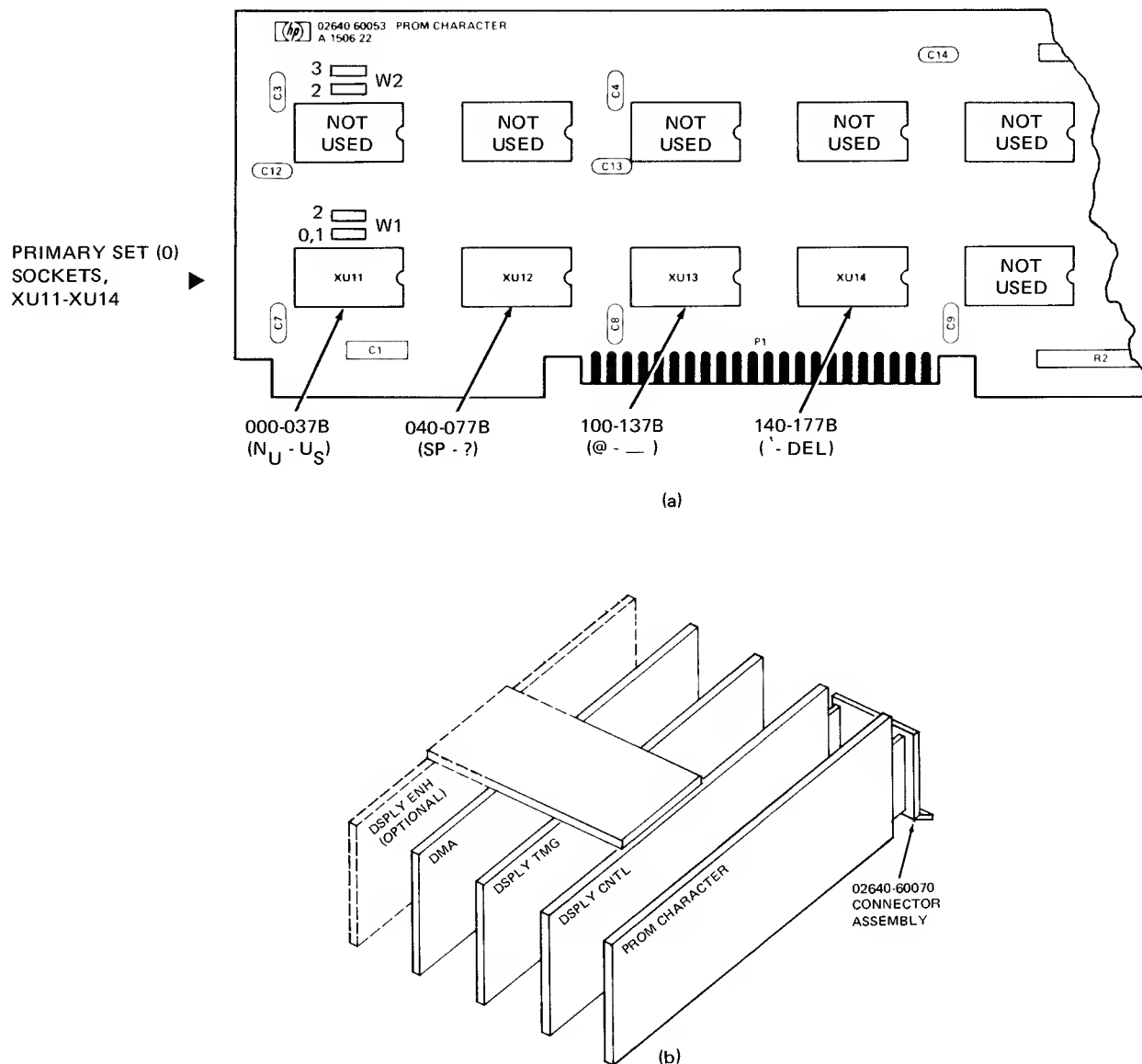


FIGURE 8.1
Replacing the Primary Set (Set 0) with a PROM Version
a) PROM Location and Jumper Configuration on the PROM
Character Board. b) Display Subsystem Board Configuration.

REPLACEMENT OF ALTERNATE SETS 1, 2, AND 3

Any one or two alternate sets may be replaced with custom PROM versions. Figure 8.2a illustrates the PROM sockets used for this purpose and their respective character assignments. Table 8.1 shows the jumper configuration for both alphanumeric and microvector character sets.

A set represented in PROM cannot simultaneously be represented in ROM on the Display Enhancement Board. Mixing of different sets is permitted. Thus alternate set 1 may be a Math Symbol Set or Line Drawing Set ROM

while alternate set 2 is a custom PROM set on the PROM Character Board. The jumper configuration for alternate character sets 1 and 2 would then be taken from the installation manual and Table 8.1 respectively.

The PROM Character Board is plugged into the 264XX backplane adjacent to the Display Enhancement Board as is shown in Figure 8.2b. The two boards are connected together with the Connector Assembly (02640-60070) provided. Note that the correct orientation of the connector is with the handle in a downward position.

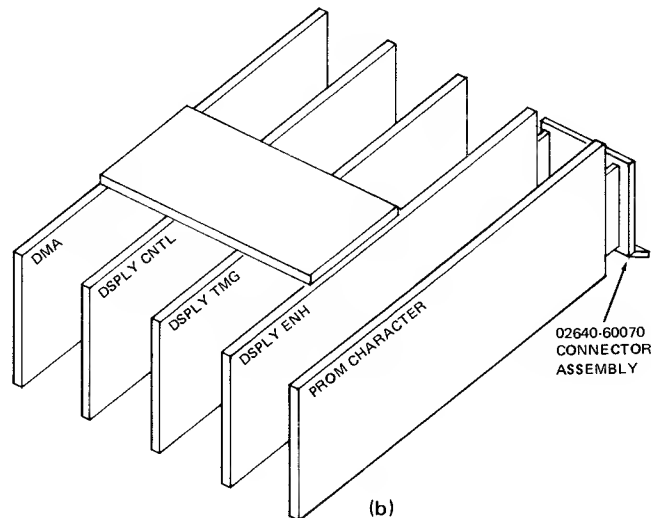
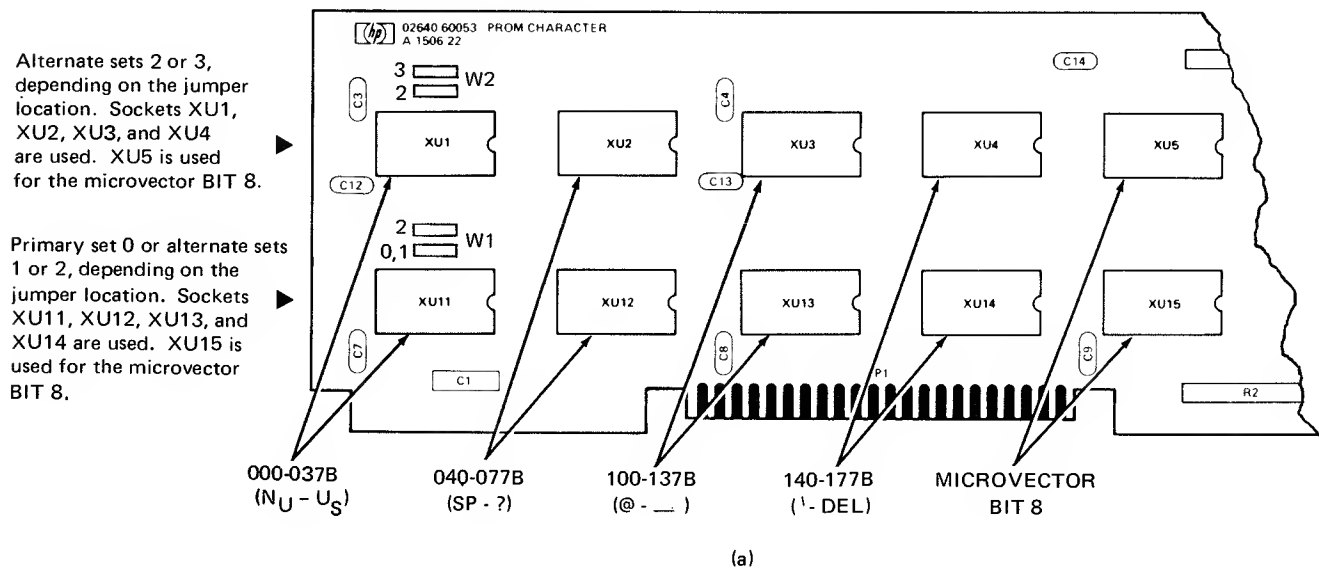
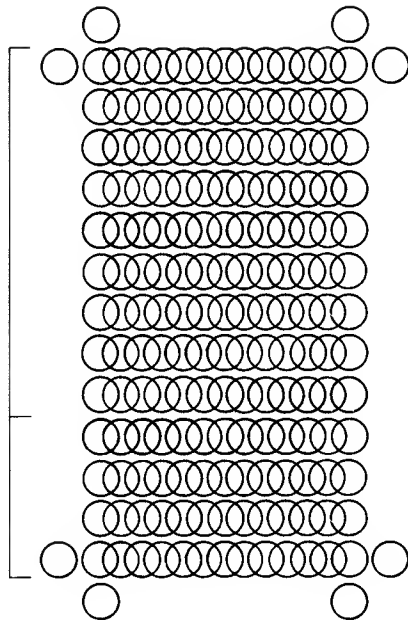


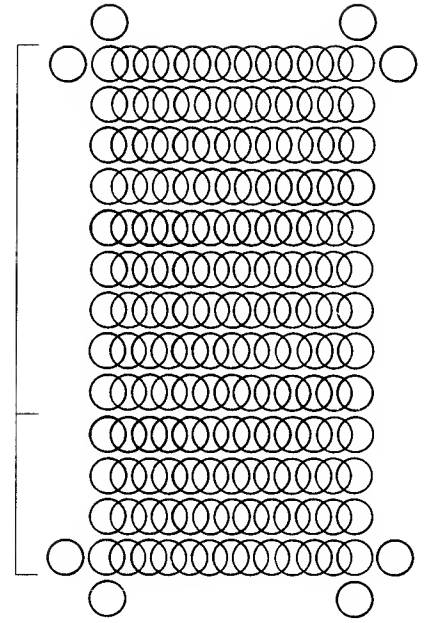
FIGURE 8.2
Replacing Alternate Sets 1, 2, or 3 with PROM Versions
on the PROM Character Board. a) PROM and Jumper
Locations for Replacing Alternate Sets 1, 2, or 3.
b) Display Subsystem Board Configuration.

TABLE 8.1
Jumper Configurations

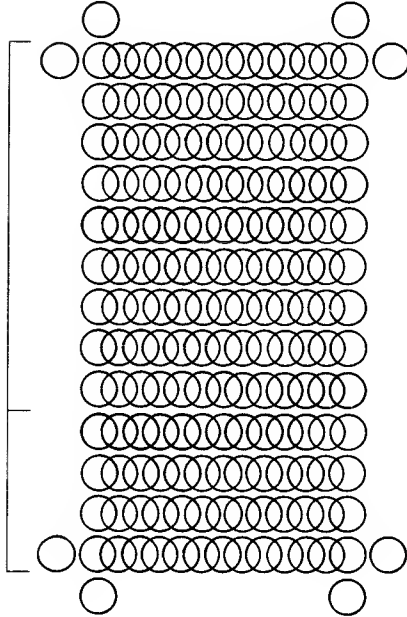
PROM REPLACEMENT SET	PROM CHARACTER BOARD				DISPLAY BOARD AFFECTED	
	JUMPER W1 POSITION	SOCKETS USED	JUMPER W2 POSITION	SOCKETS USED	BOARD NAME	JUMPER POSITION
SET 0	0,1	XU11–XU14	NOT USED	NOT USED	DSPY CNTL	IN
ALT SET 1	0,1	XU11–XU14 (ALSO XU15 IF SET 1 IS MICROVECTOR)	NOT USED	NOT USED	DSPY ENH	W1, W2 IN (W2 OUT IF SET 1 IS MICROVECTOR)
ALT SET 2	2	XU11–XU14 (ALSO XU15 IF SET 2 IS MICROVECTOR)	NOT USED	NOT USED	DSPY ENH	W3, W4 IN (W4 OUT IF SET 2 IS MICROVECTOR)
ALT SET 3	NOT USED	NOT USED	3	XU1–XU4 (ALSO XU5 IF SET 3 IS MICROVECTOR)	DSPY ENH	W5, W6 IN (W6 OUT IF SET 3 IS MICROVECTOR)
ALT SETS 1,2	0,1	SET 1 IN XU11–XU14 (ALSO XU15 IF SET 1 IS MICROVECTOR)	2	SET 2 IN XU1–XU4 (ALSO XU5 IF SET 2 IS MICROVECTOR)	DSPY ENH	W1, W2, W3, W4 IN (W2, W4 OUT IF SETS 1 AND/OR 2 RESPECTIVELY ARE MICRO- VECTOR)
ALT SETS 1,3	0,1	SET 1 IN XU11–XU14 (ALSO XU15 IF SET 1 IS MICROVECTOR)	3	SET 3 IN XU1–XU4 (ALSO XU5 IF SET 3 IS MICROVECTOR)	DSPY ENH	W1, W2, W5, W6 IN (W2, W6 OUT IF SETS 1 AND/OR 3 RESPECTIVELY ARE MICRO- VECTOR)
ALT SETS 2,3	2	SET 2 IN XU11–XU14 (ALSO XU15 IF SET 2 IS MICROVECTOR)	3	SET 3 IN XU1–XU4 (ALSO XU5 IF SET 3 IS MICROVECTOR)	DSPY ENH	W3, W4, W5, W6 IN (W4, W6 OUT IF SETS 2 AND/OR 3 RESPECTIVELY ARE MICRO- VECTOR)



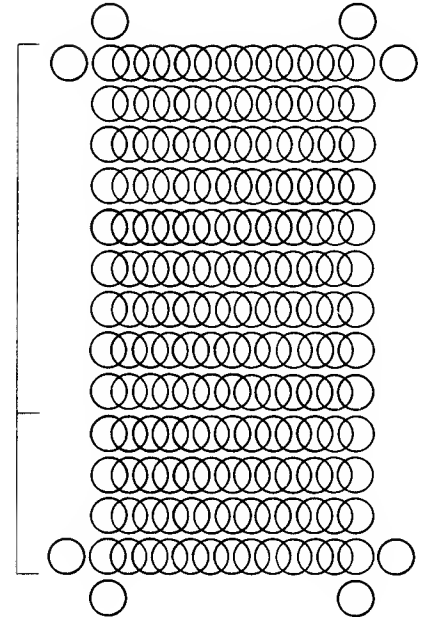
Character _____
ASCII code _____



Character _____
ASCII code _____



Character _____
ASCII code _____



Character _____
ASCII code _____

Character _____
 ASCII code _____

Character _____
 ASCII code _____

Character _____
 ASCII code _____

Character _____
 ASCII code _____

PROGRAMMING INFORMATION

REQUIRED INFORMATION FOR MMI TO PROGRAM TO YOUR TRUTH TABLE

TRUTH TABLES

MMI can program devices at our facility from MMI truth table forms (available on request). For customers desiring to make their own forms, an example is shown below:

WORD NUMBER	OUTPUTS							
	PIN → 17	16	15	14	13	11	10	9
	O ₈	O ₇	O ₆	O ₅	O ₄	O ₃	O ₂	O ₁
0	H	H	H	L	H	L	H	H
1	L	H	L	H	L	H	L	H
.
.
511	L	H	H	H	H	H	H	L

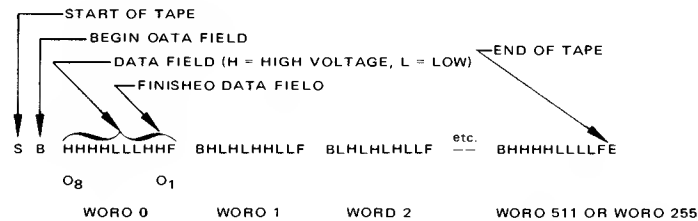
Note: A high voltage on the data out lines is signified by an "H." A low voltage on the data out lines is signified by an "L." The word number assumes positive logic on the address pins, so for example, word 511 = HHHHHHHH.

PAPER TAPE FORMAT

Truth tables can also be sent to MMI in an ASCII tape format. Information can be sent to us by air mail or TWX 910-339-9224. The tape reading equipment at MMI only recognizes ASCII characters S, B, H, L, F and E and interprets them respectively as Start, Begin a word, High data, Low data, Finish a word, and End of tape. All other characters such as carriage returns, line feeds, etc. are ignored so that comments and spaces may be sent in the data field to improve readability. Comments, however, should not use the characters S, B, H, L, F, E. Word addresses must begin with zero and count sequentially to word 511.

In order to assist the machine operator in determining where the heading information stops and the data field begins, 25 bell characters or rubout characters should precede the start of the truth table. Any type of paper tape (mylar, fanfold, etc.) is acceptable. Channel 1 is the most significant bit and channel 8 (parity) is ignored. Sprocket holes are located between channels 3 and 4. Note that the order of the outputs between characters B and F is O₈ to O₁, not O₁ to O₈.

A typical list of characters and their machine interpretations is shown on the next page.



The required heading information at the beginning of the tape is as follows:

CUSTOMER'S NAME AND PHONE _____ TRUTH TABLE NUMBER _____
 CUSTOMER'S TWX NUMBER _____ NUMBER OF TRUTH TABLES _____
 PURCHASE ORDER NUMBER _____ TOTAL NUMBER OF PARTS _____
 MMI PART NUMBER _____ NUMBER OF PARTS OF EACH TRUTH TABLE _____
 CUSTOMER SYMBOLIZED PART NUMBER _____ 25 BELL OR RUBOUT CHARACTERS _____

An example is shown below for a 256 x 4 PROM (6300)

BLARNEY ELECTRONICS 408-735-8104

TWX 911-338-9225

PO142

6300

0431

12

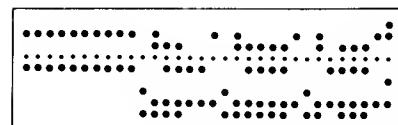
1

3

3

SBLLHF BLLLLF BLHLHF BLHHHF BLLHHF BHHHHF BLLLLF BLHLHF BLLLLF
 BLLLLF BLHLHF BLLHHF BHHHLF BHHLLF BLLLLF BHHLLF BLLLLF BLHLHF

8 level
TWX



Input Format

I. ROM and PROM Truth Table Format

Programming information should be sent in the form of computer punched cards or punched paper tape. When using the 7600C or MCS programmers, punched paper tape should be used. In all cases, a printout of the truth table should be accompanied with the order.

The following general format is applicable to the programming information sent to Intel:

1. A data field should start with the most significant bit and end with the least significant bit.
2. The data field should consist of P's and N's. A P is to indicate a high level output (most positive) and an N a low level output (most negative). If the programming information is sent on a punched paper tape, then a start character, B, and an end character, F, must be used in the data field.

A. PUNCHED CARD FORMAT

An 80 column Hollerith card (preferably interpreted) punched by an IBM 026 or 029 keypunch should be submitted. The first card will be a title card. The format is as follows:

1. Title Card

DECIMAL NUMBER INDICATING THE TRUTH TABLE NUMBER
NO. OF OUTPUTS
4 or 8

TITLE CARD DESIGNATION

CUSTOMER'S COMPANY NAME

CUSTOMER'S DIVISION OR LOCATION

CUSTOMER'S P/N

INTEL P/N

Column	Data
1	Punch a T
2-5	Blank
6-30	Customer Company Name
31-34	Blank
35-54	Customer's Company Division or location
55-58	Blank
59-63	Customer Part Number
64-67	Blank
68-74	Punch the Intel 4 digit basic part number and in () the number of output bits, e.g. 3604(8).
75-78	Blank
79-80	Punch a 2 digit decimal number to identify the truth table will be 00, second 01, third 03, etc.

Input Format

2. For a 512 word x 8 bit organization, cards 2 and the following cards should be punched as shown:
Each card specifies the 4 bit output of 14 words.

DECIMAL WORD ADDRESS BEGINNING EACH CARD

MSB

LSB

8 DATA FIELDS

DECIMAL NUMBER INDICATING THE TRUTH TABLE NUMBER

Column	Data
1-5	Punch the 5 digit decimal equivalent of the binary coded location which begins each card. The address is right justified, i.e., 00000, 00008, 00016, etc.
6	Blank
7-14	Data Field
15	Blank
16-23	Data Field
24	Blank
25-32	Data Field
33	Blank
34-41	Data Field
42	Blank
43-50	Data Field
51	Blank
52-59	Data Field
60	Blank
61-68	Data Field
69	Blank
70-77	Data Field
78	Blank
79-80	Punch same 2 digit decimal number as in title card.

B. PAPER TAPE FORMAT

The paper tapes which should be used are the:

1. 1" wide paper tape using 7 or 8 bit ASCII code, such as a model 33 ASR teletype produces, or the
2. 11/16" wide paper tape using 5 bit Baudot code, such as a Telex produces.

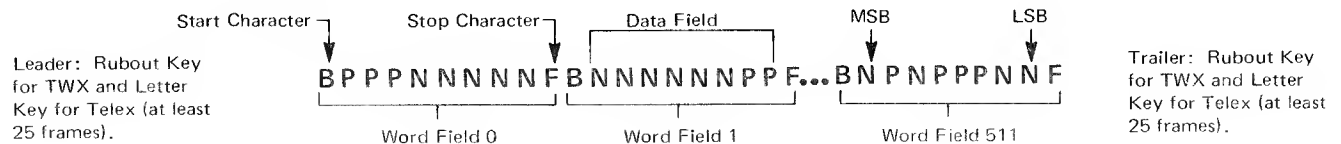
The format requirements are as follows:

1. All word fields are to be punched in consecutive order, starting with word field 0 (all addresses low). There must be exactly 512 word fields for the 512 x 8 PROM organization.
2. Each word field must begin with the start character B and end with the stop character F. There must be exactly 8 or 4 data characters between the B and F for the N x 8 or N x 4 organization respectively.

NO OTHER CHARACTERS, SUCH AS RUBOUTS, ARE ALLOWED ANYWHERE IN A WORD FIELD. If in preparing a tape, an error is made, the entire word field, including the B and F must be rubbed out. Within the word field, a P results in a high level output, and an N results in a low level output.

3. Preceding the first word field and following the last word field, there must be a leader/trailer length of at least 25 characters. This should consist of rubout punches (letter key for Telex tapes)
4. Between word fields, comments not containing B's or F's may be inserted. Carriage return and line feed characters should be inserted (as a "comment") just before each word field (or at least between every four word fields). When these carriage returns, etc. are inserted, the tape may be easily listed on the teletype for purposes of error checking. The customer may also find it helpful to insert the word number (as a comment) at least every four word fields.
5. Included in the tape before the leader should be the customer's complete Telex or TWX number and if more than one pattern is being transmitted, the ROM pattern number.
6. MSB and LSB are the most and least significant bit of the device outputs. Refer to the data sheet for the pin numbers.

Example of 512 x 8 format (N = 512):



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BASIC ROMAN CHARACTER SET (SPACE)-? (40-77H)

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

BASIC ROMAN CHARACTER SET (SPACE)=? (40=77B)

01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHHHHHHH	1 LHHLLHHH	1 LLLHHLLH	1 HHHHHHHH
2 HHHHHHHH	2 LHHLLHHH	2 LLLHHLLH	2 LHHHLHLH
3 HHHHHHHH	3 LHHLLHHH	3 LLLHHLLH	3 HHHHLHLH
4 HHHHHHHH	4 LHHLLHHH	4 LLLHHLLH	4 LHHLLLLH
5 HHHHHHHH	5 LHHLLHHH	5 HHHHHHHH	5 HHHHLHLH
6 HHHHHHHH	6 LHHLLHHH	6 HHHHHHHH	6 LLLLLLLH
7 HHHHHHHH	7 HHHHHHHH	7 HHHHHHHH	7 HHLHLHHH
8 HHHHHHHH	8 HHHHHHHH	8 HHHHHHHH	8 LHLHHHHH
9 HHHHHHHH	9 LHHLLHHH	9 HHHHHHHH	9 HHHHHHHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHHHLHHH	1 HHLHLHLH	1 HHHHHHHH	1 LHHLLHHH
2 HHHLLLLH	2 LHLHLHLH	2 LHHLLHHH	2 HHHHLHLH
3 HHLHLHLH	3 HHLHLHLH	3 HHHHLHLH	3 LHHLLHHH
4 HHLHLHLH	4 LHHHLHHH	4 LHHLLHHH	4 HHHLLHHH
5 HHHLLLLH	5 HHHHLHHH	5 HHHLLHHH	5 HHHHHHHH
6 HHHHLHLH	6 LHHLLHHH	6 LHLHLHLH	6 HHHHHHHH
7 HHLHLHLH	7 HHHHLHLH	7 HHLHLHLH	7 HHHHHHHH
8 HHHLLLLH	8 LHLHLHLH	8 LHLHLHLH	8 HHHHHHHH
9 HHHHLHHH	9 HHLHLHLH	9 HHHLLHLH	9 HHHHHHHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 LHHHLHHH	1 LHLHLHHH	1 HHHHHHHH	1 HHHHHHHH
2 HHHLLHHH	2 HHHHLHHH	2 HHHHHHHH	2 HHHHHHHH
3 LHLHHHHH	3 LHHHLHHH	3 HHHHLHLH	3 HHHHLHHH
4 HHLHHHHH	4 HHHHHLLH	4 LHHLLHHH	4 HHHHLHHH
5 HHLHHHHH	5 HHHHHLLH	5 HHLHLHLH	5 HHLLLLLH
6 HHLHHHHH	6 HHHHHLLH	6 LHHLLHHH	6 HHHHLHHH
7 LHLHHHHH	7 LHHHLHHH	7 HHHHLHLH	7 HHHHLHHH
8 HHHLLHHH	8 HHHHLHHH	8 HHHHHHHH	8 HHHHHHHH
9 LHHLLHHH	9 LHLHHHHH	9 HHHHHHHH	9 HHHHHHHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHHHHHHH	1 HHHHHHHH	1 HHHHHHHH	1 HHHHHHLH
2 HHHHHHHH	2 HHHHHHHH	2 HHHHHHHH	2 LHHHLHHH
3 HHHHHHHH	3 HHHHHHHH	3 HHHHHHHH	3 HHHHLHHH
4 HHHHHHHH	4 HHHHHHHH	4 HHHHHHHH	4 LHHHLHHH
5 HHHHHHHH	5 HHLLLLLH	5 HHHHHHHH	5 HHHHLHHH
6 HHHHHHHH	6 HHHHHHHH	6 HHHHHHHH	6 LHHLHHHH
7 HHHHHHHH	7 HHHHHHHH	7 HHHHHHHH	7 HHLHHHHH
8 LHHLLHHH	8 HHHHHHHH	8 LHHLLHHH	8 LHLHHHHH
9 HHHHLHHH	9 HHHHHHHH	9 LHHLLHHH	9 HHLHHHHH
10 LHHHLHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHLHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH

01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHHLLLLH	1 HHHHLLLL	1 HHHLLLLH	1 LHHLLLLH
2 LHHHLLLL	2 HHHHLLLL	2 HHHHLLLL	2 LLHHHLLL
3 HHHHLLLL	3 HHHHLLLL	3 LLHHHLLL	3 HHHHHHLL
4 HHHHLLLL	4 HHHHLLLL	4 LHHHLLLH	4 LHHHLLLH
5 HHHHLLLL	5 HHHHLLLL	5 LHHHLLLH	5 LHHHLLLH
6 HHHHLLLL	6 HHHHLLLL	6 HHHHLLLL	6 LHHHLLLH
7 HHHHLLLL	7 HHHHLLLL	7 HHHHLLLL	7 HHHHHHLL
8 LHHHLLLH	8 HHHHLLLL	8 LLHHHLLL	8 LLHHHLLL
9 HHHHLLLL	9 HHHHLLLL	9 LLLLLLLL	9 LHHLLLLH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 LHHHLLLH	1 LLLLLLLL	1 LHHLLLLH	1 LLLLLLLL
2 LHHHLLLH	2 LLHHHLLL	2 LLHHHLLL	2 LHHHLLLH
3 LHHHLLLH	3 LLHHHLLL	3 HHHHHHHH	3 HHHHHHLL
4 LHHHLLLH	4 LLHHHLLL	4 HHHHHHHH	4 LHHHLLLH
5 LLHHHLLL	5 LLLLLLLL	5 HHHHLLLH	5 HHHHLLLH
6 LLLLLLLL	6 LHHHLLLH	6 HHHHLLLH	6 LHHHLLLH
7 LHHHLLLH	7 LHHHLLLH	7 HHHHLLLH	7 HHHHLLLH
8 LHHHLLLH	8 LLHHHLLL	8 LLHHHLLL	8 LHHHLLLH
9 LHHHLLLH	9 HHHHLLLH	9 LHHLLLLH	9 HHHHLLLH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 LHHLLLLH	1 LHHLLLLH	1 HHHHHHHH	1 HHHHHHHH
2 LLHHHLLL	2 LLHHHLLL	2 HHHHHHHH	2 HHHHHHHH
3 HHHHHHLL	3 HHHHHHLL	3 HHHHHHHH	3 HHHHHHHH
4 LLHHHLLL	4 HHHHHHLL	4 LHHLLLLH	4 LHHLLLLH
5 LHHLLLLH	5 HHHHLLLH	5 LHHLLLLH	5 LHHLLLLH
6 LLHHHLLL	6 HHHHHHLL	6 HHHHHHHH	6 HHHHHHHH
7 HHHHHHLL	7 HHHHHHLL	7 HHHHHHHH	7 HHHHHHHH
8 LLHHHLLL	8 LLHHHLLL	8 LHHLLLLH	8 LHHLLLLH
9 LHHLLLLH	9 LHHLLLLH	9 LHHLLLLH	9 HHHHLLLH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 LHHHLLLH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHLLLH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHHHHHHH	1 HHHHHHHH	1 HHHHHHHH	1 HHHLLLLH
2 HHHHHLLL	2 HHHHHHHH	2 HHHLLLLH	2 HHHHLLLH
3 HHHHLLLH	3 HHHHHHHH	3 HHHLLLLH	3 HHHHLLLH
4 HHHHLLLH	4 HHHHLLLH	4 HHHHLLLH	4 LHHHLLLH
5 HHHHLLLH	5 HHHHHHHH	5 HHHHLLLH	5 LHHHLLLH
6 HHHHLLLH	6 HHHHLLLH	6 HHHHLLLH	6 HHHHLLLH
7 HHHHLLLH	7 HHHHHHHH	7 HHHHLLLH	7 HHHHLLLH
8 HHHHLLLH	8 HHHHHHHH	8 HHHHLLLH	8 HHHHHHHH
9 HHHHHHHH	9 HHHHHHHH	9 HHHHHHHH	9 HHHHLLLH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH

GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG

0-3	S	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
4-7		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
8-11		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
12-15		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
16-19		BHHHHHHHFF	BHHHLLHHLF	BHHHLLHHLF	BHHHLLHHLF
20-23		BHHHLLHHLF	BHHHLLHHLF	BHHHLLHHLF	BHHHHHHHFF
24-27		BHHHHHHHFF	BHHHLLHHLF	BHHHHHHHFF	BHHHHHHHFF
28-31		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
32-35		BHHHHHHHFF	BHLLHHLLLF	BHLLHHLLLF	BHLLHHLLLF
36-39		BHLLHHLLLF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
40-43		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
44-47		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
48-51		BHHHHHHHFF	BHHHHHHHFF	BHLHLHHHFF	BHLHLHHHFF
52-55		BHLLLLLHFF	BHMLHLHHFF	BHMLLLLLFF	BHMLHLHHFF
56-59		BHHHHLHLLF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
60-63		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
64-67		BHHHHHHHFF	BHHHLLHHHFF	BHMLLHHHFF	BHLHLHHHFF
68-71		BHHHLLHHHFF	BHMLLHHHFF	BHLHLHHHFF	BHLHLHHHFF
72-75		BHMLLHHHFF	BHHHLLHHHFF	BHHHHHHHFF	BHHHHHHHFF
76-79		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
80-83		BHHHHHHHFF	BHLHHLLHHF	BHMLHLHLFF	BHMLHLHHFF
84-87		BHHHLLHHHFF	BHHHLLHHHFF	BHHHLLHHLF	BHLLHLHHHFF
88-91		BHLHLHLHLF	BHLHLHLHLF	BHHHHHHHFF	BHHHHHHHFF
92-95		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
96-99		BHHHHHHHFF	BHHHHHHHFF	BHHHLLHHLF	BHMLHLHHHFF
100-103		BHHHLLHHLF	BHHHLLHHHFF	BHLHLHLHLF	BHLLHLHLHFF
104-107		BHMLHLHLHF	BHLHLHHHFF	BHHHHHHHFF	BHHHHHHHFF
108-111		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
112-115		BHHHHHHHFF	BHMLLHHHLF	BHMLLHHHFF	BHHHLLHHLF
116-119		BHHHLLHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
120-123		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
124-127		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
128-131		BHHHHHHHFF	BHMLLHHHLF	BHHHLLHHHFF	BHHHLLHLHFF
132-135		BHHHLLHHHFF	BHHHLLHHHFF	BHHHLLHHFF	BHHHLLHLHFF
136-139		BHHMLLHHHFF	BHMLLHHHFF	BHHHHHHHFF	BHHHHHHHFF
140-143		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
144-147		BHHHHHHHFF	BHHHLLHLHFF	BHMLLHHHFF	BHMLLHHHFF
148-151		BHLLHHHHHFF	BHLLHHHHHFF	BHLLHHHHHFF	BHMLLHHHFF
152-155		BHMLLHHHFF	BHHHLLHLHFF	BHHHHHHHFF	BHHHHHHHFF
156-159		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
160-163		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHMLLHHHFF
164-167		BHHHLLHHLF	BHMLLHLHFF	BHHHLLHHLF	BHMLLHHHFF
168-171		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
172-175		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
176-179		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHLLHHHFF
180-183		BHHHLLHHHFF	BHLLLLLHFF	BHHHLLHHHFF	BHHHLLHHHFF
184-187		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
188-191		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
192-195		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
196-199		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
200-203		BHHHLLHHLF	BHMLLHHHFF	BHMLLHHHFF	BHMLLHHHFF
204-207		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
208-211		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
212-215		BHHHHHHHFF	BHLLLLLHFF	BHHHHHHHFF	BHHHHHHHFF
216-219		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
220-223		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
224-227		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
228-231		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
232-235		BHHHLLHHLF	BHHHLLHHLF	BHHHHHHHFF	BHHHHHHHFF
236-239		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF
240-243		BHHHHHHHFF	BHLHHHHHFF	BHMLHHHHHFF	BHMLHHHHHFF
244-247		BHHHLLHHLF	BHHMLHHHFF	BHHHLLHHLF	BHHHLLHHHFF
248-251		BHHHHLLHLF	BHHHHLLHHF	BHHHHHHHFF	BHHHHHHHFF
252-255		BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF	BHHHHHHHFF

E

BASIC ROMAN CHARACTER SET @-(UNDERLINE) (100-1378)

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1 X X X X	1 X X	1 X X X X X X	1 X X X X
2 X X X	2 X X	2 X X X X X X	2 X X X X
3 X X X X	3 X X	3 X X X X X	3 X X X X
4 X X X X	4 X X	4 X X X X X	4 X X X X
5 X X X X	5 X X X X X	5 X X X X X	5 X X X X
6 X X X X	6 X X X X X	6 X X X X X	6 X X X X
7 X X X X	7 X X X X	7 X X X X X	7 X X X X
8 X X X X	8 X X X X	8 X X X X X	8 X X X X
9 X X X X	9 X X X X	9 X X X X X	9 X X X X
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
.1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1 X X X X X	1 X X X X X X	1 X X X X X X	1 X X X X
2 X X X X	2 X X X X X	2 X X X X X	2 X X X X
3 X X X X	3 X X X X X	3 X X X X X	3 X X X X
4 X X X X	4 X X X X X	4 X X X X X	4 X X X X
5 X X X X	5 X X X X X	5 X X X X X	5 X X X X
6 X X X X	6 X X X X X	6 X X X X X	6 X X X X
7 X X X X	7 X X X X X	7 X X X X X	7 X X X X
8 X X X X	8 X X X X X	8 X X X X X	8 X X X X
9 X X X X	9 X X X X X	9 X X X X X	9 X X X X
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1 X X X X	1 X X X X	1 X X X X	1 X X X X
2 X X X X	2 X X X X	2 X X X X	2 X X X X
3 X X X X	3 X X X X	3 X X X X	3 X X X X
4 X X X X	4 X X X X	4 X X X X	4 X X X X
5 X X X X	5 X X X X	5 X X X X	5 X X X X
6 X X X X	6 X X X X	6 X X X X	6 X X X X
7 X X X X	7 X X X X	7 X X X X	7 X X X X
8 X X X X	8 X X X X	8 X X X X	8 X X X X
9 X X X X	9 X X X X	9 X X X X	9 X X X X
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1 X X X X	1 X X X X	1 X X X X	1 X X X X
2 X X X X	2 X X X X	2 X X X X	2 X X X X
3 X X X X	3 X X X X	3 X X X X	3 X X X X
4 X X X X	4 X X X X	4 X X X X	4 X X X X
5 X X X X	5 X X X X	5 X X X X	5 X X X X
6 X X X X	6 X X X X	6 X X X X	6 X X X X
7 X X X X	7 X X X X	7 X X X X	7 X X X X
8 X X X X	8 X X X X	8 X X X X	8 X X X X
9 X X X X	9 X X X X	9 X X X X	9 X X X X
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

BASIC ROMAN CHARACTER SET 0-(UNDERLINE) (100-1378)

01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 LHLLLLHH	1 LHHLLLHH	1 HLLLLLHH	1 HHHLLLHH
2 HHLHHHLL	2 HHLHHHLL	2 HHLHHHLL	2 HHLHHHLL
3 LLHLLHLL	3 LHLHHHLL	3 HHLHHHLL	3 LLHHHHLL
4 HLHLHLHL	4 HHLHHHLL	4 HHLHHHLL	4 LLHHHHHH
5 HLHLHLHL	5 LLHHHHLL	5 HLLLLLHH	5 LLHHHHHH
6 HLHLLLLH	6 LLLLLLLL	6 HHLHHHLL	6 LLHHHHHH
7 LLHHHLLH	7 LLHHHLLH	7 HHLHHHLL	7 LLHHHLLH
8 HHLHHHHH	8 LLHHHLLH	8 HHLHHHLL	8 HHLHHHLL
9 LHLLLLHH	9 LLHHHLLH	9 HLLLLLHH	9 HHLLLLHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HLLLLLHH	1 LLLLLLLL	1 LLLLLLLL	1 HHHLLLHH
2 HHLHHHLL	2 LLHHHHHH	2 LLHHHHHH	2 HHLHHHLL
3 HHLHHHLL	3 LLHHHHHH	3 LLHHHHHH	3 LLHHHHHH
4 HHLHHHLL	4 LLHHHHHH	4 LLHHHHHH	4 HHLHHHLL
5 HHLHHHLL	5 LLLLLLLL	5 LLLLLLLL	5 HHLHHHLL
6 HHLHHHLL	6 LLHHHHHH	6 LLHHHHHH	6 HHLHHHLL
7 HHLHHHLL	7 LLHHHHHH	7 LLHHHHHH	7 LLHHHLLH
8 HHLHHHLL	8 LLHHHHHH	8 LLHHHHHH	8 HHLHHHLL
9 HLLLLLHH	9 LLLLLLLL	9 LLHHHHHH	9 HHLLLLHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 LLHHHHLL	1 HHLLLLHH	1 LLHHHHLL	1 LLHHHHLL
2 LLHHHHLL	2 HHLLLLHH	2 LLHHHHLL	2 LLHHHHLL
3 LLHHHHLL	3 HHLLLLHH	3 LLHHHHLL	3 LLHHLLHH
4 LLHHHHLL	4 HHLLLLHH	4 LLHHHHLL	4 LLHLHHHH
5 LLLLLLLL	5 HHLLLLHH	5 LLHHHHLL	5 LLHHHHHH
6 LLHHHHLL	6 HHLLLLHH	6 LLHHHHLL	6 LLHLHHHH
7 LLHHHHLL	7 HHLLLLHH	7 LLHHHHLL	7 LLHHLLHH
8 LLHHHHLL	8 HHLLLLHH	8 HHLHHHLL	8 LLHHHLLH
9 LLHHHHLL	9 HHLLLLHH	9 HHLLLLHH	9 LLHHHHLL
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 LLHHHHHH	1 HHLHHHLL	1 LLHHHHLL	1 HHLLLLHH
2 LLHHHHHH	2 HLLHHHLL	2 LLHHHHLL	2 LLHHHHLL
3 LLHHHHHH	3 HLHLHLHL	3 LLHHHHLL	3 LLHHHHLL
4 LLHHHHHH	4 HLHLHLHL	4 LLHLHLHL	4 LLHHHHLL
5 LLHHHHHH	5 HLHLHLHL	5 LLHLHLHL	5 LLHHHHLL
6 LLHHHHHH	6 HLHLHLHL	6 LLHHHHLL	6 LLHHHHLL
7 LLHHHHHH	7 HLHHHHLL	7 LLHHHHLL	7 LLHHHHLL
8 LLHHHHHH	8 HLHHHHLL	8 LLHHHHLL	8 LLHHHHLL
9 LLLLLLLL	9 HLHHHHLL	9 LLHHHHLL	9 HHLLLLHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH

01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 LLLLLLLH	1 HHHLLLLH	1 LLLLLLLH	1 LLLLLLLH
2 LLHHHHHL	2 HHLHHHLH	2 LLHHHHHL	2 LLHHHHHL
3 LLHHHHHL	3 LLHHHHHL	3 LLHHHHHL	3 LLHHHHHH
4 LLHHHHHL	4 LLHHHHHL	4 LLHHHHHL	4 LLHHHHHH
5 LLLLLLLH	5 LLHHHHHL	5 LLLLLLLH	5 LLLLLLLH
6 LLHHHHHH	6 LLHHHLHL	6 LLHHHHHH	6 LHHHHHLH
7 LLHHHHHH	7 LLHHHLHL	7 LLHHLLHH	7 LHHHHHLH
8 LLHHHHHH	8 HHLHHHLH	8 LLHHHLHH	8 LLHHHHHL
9 LLHHHHHH	9 HHHLLLLH	9 LLHHHHHL	9 LLLLLLLH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HLLLLLLL	1 LLHHHHHL	1 HLLHHHHH	1 HLLHHHHH
2 HHHHLLHH	2 LLHHHHHL	2 HLLHHHHH	2 HLLHHHHH
3 HHHHLLHH	3 LLHHHHHL	3 HLLHHHHH	3 HLLHHHHH
4 HHHHLLHH	4 LLHHHHHL	4 LLHHHHHL	4 HLLHHHLH
5 HHHHLLHH	5 LLHHHHHL	5 HHLHHHLH	5 HLLHHHLH
6 HHHHLLHH	6 LLHHHHHL	6 LHLHHLLH	6 HLLHHHLH
7 HHHHLLHH	7 LLHHHHHL	7 HHLHLHLH	7 HLLHLHLH
8 HHHHLLHH	8 HHLHHHLH	8 LHLLLHHH	8 HLLHHHLH
9 HHHHLLHH	9 LLLLLLLH	9 HHHHLLHH	9 HLLHHHHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHLHHHLH	1 LLHHHHHL	1 HLLLLLLL	1 HHHLLLLH
2 LHLHHLLH	2 HHLHHHLH	2 HHHHHHHH	2 HHHLLHHH
3 HHLHLHLH	3 LHLHHLLH	3 HHHHHHLH	3 HHHLLHHH
4 LHHLLHHH	4 HHLHLHLH	4 HHHHHLLH	4 HHHLLHHH
5 HHHHLLHH	5 LHHLLHHH	5 HHHHLLHH	5 HHHLLHHH
6 LHHLLHHH	6 HHHHLLHH	6 HHHHLLHH	6 HHHLLHHH
7 HHHHLLHH	7 HHHHLLHH	7 HHLHHHHH	7 HHHLLHHH
8 LHLHHLLH	8 HHHHLLHH	8 HLLHHHHH	8 HHHLLHHH
9 HHLHHHLH	9 HHHHLLHH	9 HLLLLLLL	9 HHHLLLLH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHLHHHHH	1 HHHLLLLH	1 HHHLLLLH	1 HHHHHHHH
2 LHLHHHHH	2 HHHHLLHH	2 LHLLLLLH	2 HHHHHHHH
3 HHHLLHHH	3 HHHHLLHH	3 HHLHLHLH	3 HHHHHHHH
4 LHHLLHHH	4 HHHHLLHH	4 LLLHHLLH	4 HHHHHHHH
5 HHHHLLHH	5 HHHHLLHH	5 HHHHHHHH	5 HHHHHHHH
6 LHHHLLHH	6 HHHHLLHH	6 HHHHHHHH	6 HHHHHHHH
7 HHHHLLHH	7 HHHHLLHH	7 HHHHHHHH	7 HHHHHHHH
8 LHHHLLHH	8 HHHHLLHH	8 HHHHHHHH	8 HHHHHHHH
9 HHHHHHLH	9 HHHLLLLH	9 HHHHHHHH	9 HHHHHHHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HLLLLLLL
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH

256-259	BHHHHHHHMF	BHHL L L L L L F	BHL HHHH L L F	BHL HHHH L L F
260-263	BHL HHHH L L F	BHHL L L L L L F	BHHHHHHH L F	BHHHHHHH L F
264-267	BHHHHHHH L L F	BHHHHHHH L L F	BHHHHHHHHMF	BHHHHHHHHMF
268-271	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
272-275	BHHHHHHHHMF	BHHL L L L H H F	BHL HHHH L H H F	BHL HHHH L L F
276-279	BHL HHHH L L F	BHL HHHH L L F	BHL H L H H L F	BHL L H H H L F
280-283	BHL HHHH L H H F	BLHL L L L H H F	BHHHHHHHHMF	BHHHHHHHHMF
284-287	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
288-291	BHHHHHHHHMF	BHHL L L L L L F	BHL HHHH L L F	BHL HHHH L L F
292-295	BHL HHHH L L F	BHHL L L L L L F	BHHHHH L H L F	BHHH L H H L F
296-299	BHHL HHHH L L F	BHL HHHH L L F	BHHHHHHHHMF	BHHHHHHHHMF
300-303	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
304-307	BHHHHHHHHMF	BHHL L L L L H F	BHL HHHH L L F	BHHHHHHH L F
308-311	BHHHHHHH L L F	BHHL L L L L H F	BHL HHHH L L F	BHL HHHH L L F
312-315	BHL HHHH L L F	BHHL L L L L H F	BHHHHHHHHMF	BHHHHHHHHMF
316-319	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
320-323	BHHHHHHHHMF	BL L L L L L L H F	BHHHL HHHHMF	BHHHL HHHHMF
324-327	BHHHL HHHHMF	BHHHL HHHHMF	BHHHL HHHHMF	BHHHL HHHHMF
328-331	BHHHL HHHHMF	BHHHL HHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
332-335	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
336-339	BHHHHHHHHMF	BHL HHHH L L F	BHL HHHH L L F	BHL HHHH L L F
340-343	BHL HHHH L L F	BHL HHHH L L F	BHL HHHH L L F	BHL HHHH L L F
344-347	BHL HHHH L H H F	BHHL L L L L H F	BHHHHHHHHMF	BHHHHHHHHMF
348-351	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
352-355	BHHHHHHHHMF	BL HHHH L H H F	BL HHHH L H H F	BL HHHH L H H F
356-359	BHL HHHH L L F	BHL HHHH L H H F	BHHL HHL H L F	BHHL H L H H H F
360-363	BHHHL L H H L F	BHHHL HHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
364-367	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
368-371	BHHHHHHHHMF	BL HHHH L H H F	BL HHHH L H H F	BL HHHH L H H F
372-375	BL HHL HHL H F	BL HHL HHL H F	BL HHL HHL H F	BL H L H L H L H F
376-379	BL HHL HHL H F	BL HHHH L H H F	BHHHHHHHHMF	BHHHHHHHHMF
380-383	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
384-387	BHHHHHHHHMF	BHL HHHH L H H F	BHHL HHL H L F	BHHL H L H H H F
388-391	BHHHL L H H L F	BHHHL HHHHMF	BHHHL L H H L F	BHHL H L H H H F
392-395	BHHL HHL H L F	BHL HHHH L H H F	BHHHHHHHHMF	BHHHHHHHHMF
396-399	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
400-403	BHHHHHHHHMF	BHL HHHH L L F	BHL HHHH L H H F	BHHL HHL L L F
404-407	BHHL H L H H H F	BHHHL L H H L F	BHHHL HHHHMF	BHHHL HHHHMF
408-411	BHHHL HHHHMF	BHHHL HHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
412-415	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
416-419	BHHHHHHHHMF	BL L L L L L L H F	BL HHHHHHHHMF	BHL HHHHHHHHMF
420-423	BHHL HHHH H H F	BHHHL HHHHMF	BHHHL HHHHMF	BHHHHH L H H F
424-427	BHHHHHHH L H F	BL L L L L L L H F	BHHHHHHHHMF	BHHHHHHHHMF
428-431	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
432-435	BHHHHHHHHMF	BHHL L L L H H F	BHHHL HHHHMF	BHHHL HHHHMF
436-439	BHHHL HHHHMF	BHHHL HHHHMF	BHHHL HHHHMF	BHHHL HHHHMF
440-443	BHHHL HHHHMF	BHHL L L L H H F	BHHHHHHHHMF	BHHHHHHHHMF
444-447	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
448-451	BHHHHHHHHMF	BHHHHH L H H F	BHHHHH L H L F	BHHHL HHHHMF
452-455	BHHHHH L H L F	BHHHL HHHHMF	BHHHL HHHHMF	BHHL HHHHMF
456-459	BHHL HHHH L F	BHL HHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
460-463	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
464-467	BHHHHHHHHMF	BHHL L L L H H F	BHHL HHHHMF	BHHL HHHHMF
468-471	BHHL HHHH H H F	BHHL HHHH H H F	BHHL HHHH H H F	BHHL HHHH H H F
472-475	BHHL HHHH H H F	BHHL L L L H H F	BHHHHHHHHMF	BHHHHHHHHMF
476-479	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
480-483	BHHHHHHHHMF	BHHL L L L H H F	BHHL L L L L H F	BHL H L L L H H F
484-487	BHL L H H L L L F	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
488-491	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
492-495	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
496-499	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
500-503	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
504-507	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BL L L L L L L H F
508-511	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF E

EXTENDED ROMAN CHARACTER SET, NULL-US (00-37B)

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1 x	1 x x x x	1 x x x x	1 x x x x
2 x x	2 x	2 x	2 x
3 x x	3 x x x x	3 x x x x	3 x x x
4 x x x	4 x	4 x	4 x
5 x x x	5 x x x x	5 x x x x x x	5 x x x x x x
6 x x	6 x	6 x x	6 x x
7 x x	7 x x x x	7 x	7 x x
8 x x	8 x	8 x x	8 x x
9 x x x x	9 x	9 x x x x	9 x x x x
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1 x x x x	1 x x x x	1 x	1 x x
2 x	2 x	2 x x	2 x x x
3 x x x	3 x x x	3 x x	3 x x x
4 x	4 x	4 x x x x	4 x x x
5 x x x x x x x	5 x x x x x x	5 x x	5 x x x x
6 x	6 x	6 x	6 x x
7 x	7 x	7 x x	7 x x x x x x
8 x	8 x x x	8 x x	8 x x
9 x	9 x x x	9 x	9 x x
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1 x x x x	1 x	1 x	1 x x
2 x x x	2 x x	2 x	2 x x
3 x x x	3 x x x	3 x	3 x x
4 x x	4 x x	4 x	4 x x x
5 x x x x x x x	5 x x x x x	5 x x x x x x	5 x x x x x x
6 x	6 x	6 x	6 x
7 x x x x	7 x	7 x x x	7 x
8 x	8 x	8 x	8 x
9 x x x x	9 x	9 x	9 x
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1 x x x x	1 x x x x	1 x x x x x	1 x x x x x
2 x	2 x	2 x	2 x
3 x x x	3 x	3 x x x x	3 x x x x
4 x	4 x	4 x	4 x
5 x x x x x	5 x x x x x x	5 x x x x x x	5 x x x x x
6 x	6 x	6 x	6 x
7 x x x	7 x x x x	7 x	7 x
8 x	8 x	8 x	8 x
9 x	9 x	9 x x	9 x
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7
0							0							0							0						
1	x	x	x				1	x	x	x				1	x	x	x				1	x	x	x			
2	x			x			2	x			x			2	x			x			2	x			x		
3	x			x			3	x			x			3	x			x			3	x			x		
4	x			x			4	x			x			4	x			x			4	x			x		
5	x	x	x	x			5	x	x	x			x	5	x	x	x		x	x	5	x	x	x		x	
6				x			6				x	x		6				x		x	6					x	
7				x			7				x			7				x			7				x	x	
8				x			8				x			8				x			8				x	x	
9				x	x	x	9				x	x	x	9				x	x	x	9				x	x	
10							10							10							10						
11							11							11							11						
12							12							12							12						
13							13							13							13						
14							14							14							14						

1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7
0							0							0							0						
1	x	x	x				1	x			x			1	x	x	x	x			1	x	x	x	x		
2	x			x			2	x	x		x			2	x						2	x					
3	x			x			3	x		x	x			3	x	x	x	x			3	x	x	x			
4	x			x			4	x			x			4	x			x			4	x					
5	x	x	x			x	5	x			x		x	5	x	x	x	x		x	5	x	x	x	x	x	
6					x		6				x		x	6				x		x	6				x	x	
7				x		x	7				x	x		7				x			7			x	x	x	
8			x	x	x	x	8				x		x	8				x			8			x		x	
9						x	9				x			9				x			9			x	x	x	
10							10							10							10						
11							11							11							11						
12							12							12							12						
13							13							13							13						
14							14							14							14						

1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7
0							0							0							0						
1		x	x	x			1	x	x	x	x			1	x	x	x	x			1	x	x	x	x		
2	x				x		2	x						2	x						2	x					
3	x						3	x	x	x				3	x	x	x	x			3	x	x	x			
4	x				x		4	x						4	x			x			4	x					
5		x	x	x		x	5	x	x	x	x		x	5	x	x	x	x	x	x	5	x	x	x	x	x	
6				x		x	6			x	x		x	6				x		x	6				x	x	
7				x	x		7			x		x	x	7				x	x	x	7				x	x	
8			x			x	8			x			x	8				x		x	8				x		
9				x			9			x			x	9				x	x	x	9				x	x	
10							10							10							10						
11							11							11							11						
12							12							12							12						
13							13							13							13						
14							14							14							14						

1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7
0							0							0							0						
1	x	x	x	x			1	x	x	x	x			1	x				x		1	x				x	
2	x						2	x						2	x				x		2	x				x	
3	x	x	x				3	x		x	x			3	x	x	x	x			3	x			x		
4	x						4	x			x			4	x			x			4	x			x		
5	x				x	x	5	x	x	x	x		x	5	x	x	x	x	x	x	5	x	x	x	x	x	
6				x		x	6				x		x	6				x		x	6				x	x	
7				x	x	x	7				x	x	x	7				x	x	x	7				x	x	
8						x	8				x			8				x		x	8					x	
9				x	x	x	9				x	x	x	9				x	x	x	9				x	x	
10							10							10							10						
11							11							11							11						
12							12							12							12						
13							13							13							13						
14							14							14							14						

EXTENDED ROMAN CHARACTER SET, NULL-US (00-37B)

01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HLLHHLLH	1 HLLLLHHH	1 HLLLLHHH	1 HLLLLHHH
2 HLLHHLLH	2 HLLHHHHH	2 HLLHHHHH	2 HLLHHHHH
3 HLLHHLLH	3 HLLLLHHH	3 HLLLLHHH	3 HLLLLHHH
4 HLLHHLLH	4 HHHHLHHH	4 HHHHLHHH	4 HLLHHHHH
5 HLLHHLLH	5 HLLLLHHH	5 HLLLLHHH	5 HLLLLHHH
6 HHHHLHHH	6 HHHHLHHH	6 LHHHLHHH	6 LHHHLHHH
7 HHHHLHHH	7 HHHHLHHH	7 HHHHLHHH	7 HHHHLHHH
8 HHHHLHHH	8 HHHHLHHH	8 LHHHLHHH	8 LHHHLHHH
9 HHHHLHHH	9 HHHHLHHH	9 HHHHLHHH	9 HHHHLHHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH

01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HLLLLHHH	1 HLLLLHHH	1 LHHHHHHH	1 LHHHHHHH
2 HHHHHHHH	2 HHHHHHHH	2 HHLHHHHH	2 HHLHHHHH
3 HLLLLHHH	3 HLLLLHHH	3 LHLHHHHH	3 HHLHHHLH
4 HHHHHHHH	4 HHHHHHHH	4 HLLLLHHH	4 HHLHHHLH
5 HLLLLLLL	5 HLLLLLLL	5 HHHHLHHH	5 HHLHHHLH
6 LHHHHHLH	6 HHHHLHHH	6 HHHHLHLH	6 LLHHHHHL
7 LHHHHHLH	7 HHHHLHHH	7 HHHHLHHH	7 HLLLLLLL
8 LHHHHHLH	8 HHHHLHLL	8 HHHHLHLH	8 HHHHLHLH
9 LHHHHHLH	9 HHHHHLLL	9 HHHHLHHH	9 LHHLLHHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH

01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HLLLLHHH	1 HHHHHHHH	1 HHHHHHHH	1 HHHHHHHH
2 HHHHHHHH	2 HHHHHHHH	2 HHHHHHHH	2 HHHHHHHH
3 HLLLLHHH	3 HHHHHHHH	3 HHHHHHHH	3 HHHHHHHH
4 HHHHHHHH	4 HHHHHHHH	4 HHHHHHHH	4 HHHHHHHH
5 HLLLLLLL	5 HHHHHHHH	5 HHHHHHHH	5 HHHHHHHH
6 HHHHHHHH	6 HHHHHHHH	6 HHHHHHHH	6 HHHHHHHH
7 HHHHHLLL	7 HHHHHHHH	7 HHHHHHHH	7 HHHHHHHH
8 HHHHHHHH	8 HHHHHHHH	8 HHHHHHHH	8 HHHHHHHH
9 HHHHHLLL	9 HHHHHHHH	9 HHHHHHHH	9 HHHHHHHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH

01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HLLLLHHH	1 LLLLLHHH	1 HLLLLHHH	1 HLLLLHHH
2 HHHHHHHH	2 HHHHHHHH	2 HHHHHHHH	2 HHHHHHHH
3 HLLLLHHH	3 HHHHHHHH	3 HLLLLHHH	3 HLLLLHHH
4 HHHHHHHH	4 HHHHHHHH	4 HHHHHHHH	4 HHHHHHHH
5 HHHLLLLL	5 LLLLLLLL	5 HHHLLLLL	5 HHHLLLLL
6 HHHHLLH	6 HHHHLLH	6 HHHHLLH	6 HHHHLLH
7 HHHHLLH	7 HHHHLLH	7 HHHHLLH	7 HHHHLLH
8 HHHHLLH	8 HHHHLLH	8 HHHHLLH	8 HHHHLLH
9 HHHHLLH	9 HHHHLLH	9 HHHHLLH	9 HHHHLLH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH

[illegible]

G G G G G G G G G G G G G G G G G G

0-3	S	BHHHHHHHHF	BHHLHHHLHF	BHLLHHLLHF	BHHLHLHLHF
4-7		BHLLHHHLHF	BLHLLHHHLF	BLHHLHHHHF	BLHHLHHHHF
8-11		HLHHHHHHHF	BLLLLHHHHF	BHHHHHHHHF	BHHHHHHHHF
12-15		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
16-19		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHHLF	BHHHLLLLHF
20-23		BHHHLHHHHF	BLHHLLLLHF	BLHHLHHHHF	BLLLLHHHHF
24-27		BLHHHHHHF	BLHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
28-31		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
32-35		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHHLF	BHHHLLLLHF
36-39		BHHHLHHHHF	BLHLLLLLLF	BHHLHHHLHF	BHHLHHHHHF
40-43		BHHLHHHLHF	BLHLLHHHF	BHHHHHHHHF	BHHHHHHHHF
44-47		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
48-51		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHHLF	BHHHLLLLHF
52-55		BHHHHHHHLF	BLHLLLLLLF	BHHLHHHLHF	BHHLHHHHHF
56-59		BHHLHHHLHF	BLHLLHHHF	BHHHHHHHHF	BHHHHHHHHF
60-63		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
64-67		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHHLF	BHHHLLLLHF
68-71		BHHHHHHHLF	BLLLLLLLLLF	BHHLHHHLHF	BHHLHHHHLF
72-75		BHHLHHHLHF	BHHLHHHLHF	BHHHHHHHHF	BHHHHHHHHF
76-79		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
80-83		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHHLF	BHHHLLLLHF
84-87		BHHHHHHHLF	BHLLLLLLLLF	BLHHLHHHHF	BLHHLHHHHF
88-91		BLHLHHHHF	BLLLHHHHF	BHHHHHHHHF	BHHHHHHHHF
92-95		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
96-99		BHHHHHHHHF	BHHHHHLHF	BHHHLLHHF	BHHHLLHLHF
100-103		BHHHLLLLHF	BLHHHLHLHF	BHLHLHHHHF	BHLLHHHHF
104-107		BHLLHHHHF	BLHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
108-111		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
112-115		BHHHHHHHHF	BHHHLHHHLF	BHHLHHHLHF	BHLLHHHLHF
116-119		BHLHHHLHHF	BHLHHHLHHF	BHLHHHHLLF	BLLLLLLLLLF
120-123		BHHLHHHHF	BHHHLHHHLF	BHHHHHHHHF	BHHHHHHHHF
124-127		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
128-131		BHHHHHHHHF	BHHHLLLLHF	BHHHLHHHLF	BHHHLLLLHF
132-135		BHHHLHHHLF	BLLLLLLLLLF	BHHHLHHHHF	BLLLLHHHHF
136-139		BLHHHHHHF	BLLLLHHHHF	BHHHHHHHHF	BHHHHHHHHF
140-143		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
144-147		BHHHHHHHHF	BHHHLHHHLF	BHHHLHHHLF	BHHHLLLLHF
148-151		BHHHLHHHLF	BLLLLHHHLF	BHHLHHHHLF	BHHLHHHHLF
152-155		BHHLHHHLHF	BHHLHHHLF	BHHHHHHHHF	BHHHHHHHHF
156-159		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
160-163		BHHHHHHHHF	BHHHHHHHLF	BHHHHHHHLF	BHHHHHHHLF
164-167		BHHHHHHHLF	BLLLHHLLHF	BHHLHHHHHF	BLLLHHHHHF
168-171		BHHLHHHHHF	BHHLHHHHF	BHHHHHHHHF	BHHHHHHHHF
172-175		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
176-179		BHHHHHHHHF	BHHHLHHHLF	BHHHLHHHLF	BHHHLLHLHF
180-183		BHHHHLLHHF	BHLLLLLLLLF	BHHLHHHHHF	BHHLHHHHHF
184-187		BHHLHHHHHF	BHHLHHHHF	BHHHHHHHHF	BHHHHHHHHF
188-191		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
192-195		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHHLF	BHHHLLLLHF
196-199		BHHHHHHHLF	BLLLLHHHLF	BHHHLHHHHF	BHLLHHHHHF
200-203		BHHHLHHHHF	BHHHLHHHHF	BHHHHHHHHF	BHHHHHHHHF
204-207		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
208-211		BHHHHHHHHF	BHHHLLLLLF	BHHHLHHHLF	BHHHHHHHLF
212-215		BHHHLHHHLF	BHLLLLLLLLF	BLHHLHHHHF	BLLLLHHHHF
216-219		BHLLHHHHHF	BLHHLHHHHF	BHHHHHHHHF	BHHHHHHHHF
220-223		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
224-227		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHHLF	BHHHLLLLHF
228-231		BHHHLHHHHF	BHLLLLLLLLF	BLHHLHHHHF	BLHHLHHHHF
232-235		BLHHLHHHHF	BHLLHHHHHF	BHHHHHHHHF	BHHHHHHHHF
236-239		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
240-243		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHHLF	BHHHLLLLHF
244-247		BHHHLHHHHF	BHLLHHLLHF	BHLHHHHHHF	BHLHHHHHHF
248-251		BHLHHHHHHF	BHLHHHHHF	BHHHHHHHHF	BHHHHHHHHF
252-255		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF

256-259	BHHHHLHHHMF	BHHHLLHLMF	BHHHLHMLHF	BHHHLHMLHF
260-263	BHHHLHMLHF	BHHHLLLHMF	BHHHLHHHMF	BHHHLHHHMF
264-267	BHHHLHHHMF	BLLLLHHHMF	BHHHHHHHMF	BHHHHHHHMF
268-271	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
272-275	BHHHHHHHMF	BHHHLLHLMF	BHHHLHMLHF	BHHHLHMLHF
276-279	BHHHLHMLHF	BHLHMLLHMF	BHLHMHMMMF	BHLHMMMMMF
280-283	BHLHMMMMMF	BLLLLHHHMF	BHHHHHHHMF	BHHHHHHHMF
284-287	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
288-291	BHHHHHHHMF	BHHHLLHLMF	BHHHLHMLHF	BHHHLHMLHF
292-295	BHHHLHMLHF	BHLHMLLHMF	BHLHMLHMMF	BHLHMMMMMF
296-299	BHLHMMMMMF	BHLLLLHMMF	BHHHHHHHMF	BHHHHHHHMF
300-303	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
304-307	BHHHHHHHMF	BHHHLLHLMF	BHHHLHMLHF	BHHHLHMLHF
308-311	BHHHLHMLHF	BHLHMLLHMF	BHLHMHMMMF	BHLHMMMMMF
312-315	BHLHMMMMMF	BHLLLLHMMF	BHHHHHHHMF	BHHHHHHHMF
316-319	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
320-323	BHHHHHHHMF	BHHHLLHLMF	BHHHLHMLHF	BHHHLHMLHF
324-327	BHHHLHMLHF	BHLHMLLHMF	BHLHMHMMMF	BHLHMMMMMF
328-331	BLLLLHHHMF	BHLHMMMMMF	BHHHHHHHMF	BHHHHHHHMF
332-335	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
336-339	BHHHHHHHMF	BHHHLHMLHF	BHHHLHMLHF	BHHHLHMLHF
340-343	BHHHLHMLHF	BLHMLHMLHF	BHLHMLHMMF	BHLHMMMMMF
344-347	BHLHMMMMMF	BLHMLHMMMF	BHHHHHHHMF	BHHHHHHHMF
348-351	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
352-355	BHHHHHHHMF	BHHHLLHLMF	BHHHLHMLHF	BHHHLHMLHF
356-359	BHHHLHMLHF	BLHMLLHLMF	BHLHMLHMMF	BHLHMMMMMF
360-363	BHLHMMMMMF	BHHHLHMMMF	BHHHHHHHMF	BHHHHHHHMF
364-367	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
368-371	BHHHHHHHMF	BHHHLLHLMF	BHHHLHMLHF	BHHHLHMLHF
372-375	BHHHHHHHMF	BLLLLHLMF	BLHMLHMMMF	BLLLLHHHMF
376-379	BLHMLHMMMF	BLLLLHHHMF	BHHHHHHHMF	BHHHHHHHMF
380-383	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
384-387	BHHHHHHHMF	BHHHLLHLMF	BHHHLHMLHF	BHHHLHMLHF
388-391	BHHHLHMLHF	BHLHMLLHMF	BHLHMLHMMF	BHLHMMMMMF
392-395	BHLHMMMMMF	BHLHMLHMMF	BHHHHHHHMF	BHHHHHHHMF
396-399	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
400-403	BHHHHHHHMF	BHHHLLHLMF	BHHHLHMLHF	BHHHLHMLHF
404-407	BHHHHHHHMF	BLHMLLHLMF	BLHMLHMMMF	BLHMLHMMMF
408-411	BLHMLHMMMF	BLHMLHMMF	BHHHHHHHMF	BHHHHHHHMF
412-415	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
416-419	BHHHHHHHMF	BHHHLLHLMF	BHHHLHMLHF	BHHHLHMLHF
420-423	BHHHLHMLHF	BLLLLHLMF	BLHMLHMMMF	BLLLLHHHMF
424-427	BLHMLHMMMF	BLLLLHHHMF	BHHHHHHHMF	BHHHHHHHMF
428-431	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
432-435	BHHHHHHHMF	BHHHLLHLMF	BHHHLHMLHF	BHHHLHMLHF
436-439	BHHHHHHHMF	BLLLLHLMF	BHHHLHMLHF	BHHHLHMLHF
440-443	BHHHLHMLHF	BLLLLHHHMF	BHHHHHHHMF	BHHHHHHHMF
444-447	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
448-451	BHHHHHHHMF	BHHHLLHLMF	BHHHLHMLHF	BHHHLHMLHF
452-455	BHHHHHHHMF	BLLLLHMLHF	BHHHLHMLHF	BLLLLHHHMF
456-459	BLHMLHMMMF	BLLLLHHHMF	BHHHHHHHMF	BHHHHHHHMF
460-463	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
464-467	BHHHHHHHMF	BHHHLLHLMF	BHHHHHHHMF	BHHHLHMLHF
468-471	BHHHLHMLHF	BLLLLHLMF	BHHHLHMLHF	BLLLLHHHMF
472-475	BLHMLHMMMF	BLLLLHHHMF	BHHHHHHHMF	BHHHHHHHMF
476-479	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
480-483	BHHHHHHHMF	BHHHLLHLMF	BHHHLHMLHF	BHHHLHMLHF
484-487	BHHHLHMLHF	BLLLLHMLHF	BHHHLHMLHF	BLLLLHHHMF
488-491	BLHMLHMMMF	BLLLLHHHMF	BHHHHHHHMF	BHHHHHHHMF
492-495	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
496-499	BHHHHHHHMF	BHHHLHMLHF	BHHHLHMLHF	BHHHLHMLHF
500-503	BHHHLHMLHF	BLLLLHLMF	BHHHLHMLHF	BLLLLHHHMF
504-507	BLHMLHMMMF	BLLLLHHHMF	BHHHHHHHMF	BHHHHHHHMF
508-511	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF

EXTENDED ROMAN CHARACTER SET (GRAVE ACCENT)-DEL (140-177B)

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

EXTENDED ROMAN CHARACTER SET (GRAVE ACCENT)=DEL (140-177B)

01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 LHHHHHHH	1 HHHHHHHH	1 LHHHHHHH	1 HHHHHHHH
2 HHHLLHHH	2 HHHHHHHH	2 LHHHHHHH	2 HHHHHHHH
3 LHHLLHHH	3 HHHHHHHH	3 LHHHHHHH	3 HHHHHHHH
4 HHHLLHHH	4 LLLLLLHH	4 LLLLLLHH	4 LHHLLHHH
5 HHHHHHHH	5 HHHHHHLL	5 LHHHHHLL	5 HHHHHHLL
6 HHHHHHHH	6 HLLLLLHH	6 LHHHHHLL	6 LHHHHHHH
7 HHHHHHHH	7 HHHHHHLL	7 LHHHHHLL	7 LHHHHHHH
8 HHHHHHHH	8 HHHHHHLL	8 LHHHHHLL	8 HHHHHHLL
9 HHHHHHHH	9 LLLLLLHH	9 LLLLLLHH	9 LHHLLHHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 LHHHHHLL	1 HHHHHHHH	1 HHHHLLLL	1 HHHHHHHH
2 LHHHHHLL	2 HHHHHHHH	2 LHHLLHHH	2 HHHHHHHH
3 LHHHHHLL	3 HHHHHHHH	3 LHHLLHHH	3 HHHHHHHH
4 LHHLLLLH	4 LHHLLLLH	4 LLLLLLHH	4 HHHLLLLH
5 LHHHHHLL	5 LHHHHHLL	5 LHHLLHHH	5 LHHHHHLL
6 LHHHHHLL	6 LLLLLLHH	6 LHHLLHHH	6 LHHHHHLL
7 LHHHHHLL	7 LHHHHHHH	7 LHHLLHHH	7 LHHHHHLL
8 LHHHHHLL	8 LHHHHHHH	8 LHHLLHHH	8 LHHHHHLL
9 LHHLLLLH	9 LHHLLLLH	9 LHHLLHHH	9 LHHLLLLH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 LHHHHHLL
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 LHHHHHLL
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHLL
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 LHHLLLLH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 LHHHHHHH	1 HHHHHHHH	1 HHHHHHHH	1 LHHHHHHH
2 LHHHHHHH	2 LHHLLHHH	2 LHHLLHHH	2 LHHHHHHH
3 LHHHHHHH	3 HHHHHHHH	3 HHHHHHHH	3 LHHHHHHH
4 LLLLLLHH	4 HHHLLHHH	4 HHHLLHHH	4 LHHHHHLL
5 LHHHHHLL	5 HHHHLLHH	5 HHHHLLHH	5 LHHLLHHH
6 LHHHHHLL	6 HHHHLLHH	6 HHHHLLHH	6 LHHLLHHH
7 LHHHHHLL	7 HHHHLLHH	7 HHHHLLHH	7 LHHLLHHH
8 LHHHHHLL	8 HHHHLLHH	8 HHHHLLHH	8 LHHLLHHH
9 LHHHHHLL	9 LHHLLLLH	9 HHHHLLHH	9 LHHHLLHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHLLHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHLLHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHLLHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHLLHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHHLLHHH	1 HHHHHHHH	1 HHHHHHHH	1 HHHHHHHH
2 HHHHLLHH	2 HHHHHHHH	2 HHHHHHHH	2 HHHHHHHH
3 HHHHLLHH	3 HHHHHHHH	3 HHHHHHHH	3 HHHHHHHH
4 HHHHLLHH	4 HLLLLLLLH	4 LLLLLLHH	4 LHHLLLLH
5 HHHHLLHH	5 HHHHLLHH	5 LHHHHHLL	5 HHHHLLHH
6 HHHHLLHH	6 HHHHLLHH	6 LHHHHHLL	6 LHHHHHLL
7 HHHHLLHH	7 HHHHLLHH	7 LHHHHHLL	7 LHHHHHLL
8 HHHHLLHH	8 HHHHLLHH	8 LHHHHHLL	8 HHHHLLHH
9 LHHLLLLH	9 HHHHLLHH	9 LHHHHHLL	9 LHHLLLLH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH

01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHHHHHHH	1 HHHHHHHH	1 HHHHHHHH	1 HHHHHHHH
2 HHHHHHHH	2 HHHHHHHH	2 HHHHHHHH	2 HHHHHHHH
3 HHHHHHHH	3 HHHHHHHH	3 HHHHHHHH	3 HHHHHHHH
4 LLLLLLHH	4 LLLLLLHH	4 HHLHLLHH	4 HHLLLLLH
5 LLHHHHHL	5 LLHHHHHL	5 HHLHHLHH	5 HHLHHHHH
6 LLHHHHHL	6 LLHHHHHL	6 HHLHHHHH	6 HHLLLLLH
7 LLHHHHHL	7 LLHHHHHL	7 HHLHHHHH	7 HHHHHHLH
8 LLHHHHHL	8 LLHHHHHL	8 HHLHHHHH	8 HHHHHHLH
9 LLLLLLHH	9 LLLLLLHH	9 HHLHHHHH	9 HHLLLLLH
10 LLHHHHHH	10 LHHHHHLH	10 HHHHHHHH	10 HHHHHHHH
11 LLHHHHHH	11 LHHHHHLH	11 HHHHHHHH	11 HHHHHHHH
12 LLHHHHHH	12 LHHHHHLH	12 HHHHHHHH	12 HHHHHHHH
13 LLHHHHHH	13 LHHHHHLH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 LHHLHHHH	1 HHHHHHHH	1 HHHHHHHH	1 HHHHHHHH
2 LHHLHHHH	2 HHHHHHHH	2 HHHHHHHH	2 HHHHHHHH
3 HHLLLLLH	3 HHHHHHHH	3 HHHHHHHH	3 HHHHHHHH
4 LHHLHHHH	4 LLHHHHHH	4 HHHHHHHH	4 HHHHHHHH
5 LHHLHHHH	5 LLHHHHHH	5 LLHHHHHL	5 HHLHHHHH
6 LHHLHHHH	6 LLHHHHHL	6 HHLHHHLH	6 HHLHHHHH
7 LHHLHHHH	7 LLHHHHHL	7 LHLHHHLH	7 LLHHHLHH
8 LHHLHHHH	8 LLHHHHHL	8 HHLHHHLH	8 HHLHHHLH
9 LHHLHHHH	9 LHLLLLLH	9 LHHLHHHH	9 LHLHHHLH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHHHHHHH	1 HHHHHHHH	1 HHHHHHHH	1 LHHHLHHH
2 HHHHHHHH	2 HHHHHHHH	2 HHHHHHHH	2 HHHHLHHH
3 HHHHHHHH	3 HHHHHHHH	3 HHHHHHHH	3 HHHHLHHH
4 LLLHHLLH	4 HHHHHHHH	4 HHLLLLLH	4 HHHHLHHH
5 HHHHLHLH	5 LLHHHHHL	5 LHHHHHLH	5 HHLHHHHH
6 LHHLLHHH	6 HHLHHHLH	6 LHHHLHHH	6 HHHHLHHH
7 LHHLLHHH	7 LHLHHHLH	7 LHHLHHHH	7 HHHHLHHH
8 HHHHLHLH	8 HHLHLHLH	8 LHLHHHHH	8 HHHHLHHH
9 LLLHHLLH	9 LHHLLHHH	9 HHLLLLLH	9 LHHHLHHH
10 HHHHHHHH	10 HHHHLHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 LHHLHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHLHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 LLLHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 LHHLLHHH	1 LHLHHHHH	1 HHHHHHHH	1 HHLHLHLH
2 LHHLLHHH	2 HHHHLHHH	2 HHHHHHHH	2 HHLHLHLH
3 LHHLLHHH	3 HHHHLHHH	3 HHHHHHHH	3 HHLHLHLH
4 LHHLLHHH	4 HHHHLHHH	4 LLLHHHHH	4 HHLHLHLH
5 HHHHHHHH	5 HHHHLHLH	5 HHLHHHLH	5 HHLHLHLH
6 LHHLLHHH	6 HHHHLHHH	6 LHHHLHLH	6 HHLHLHLH
7 LHHLLHHH	7 HHHHLHHH	7 HHHHHHHH	7 HHLHLHLH
8 LHHLLHHH	8 HHHHLHHH	8 HHHHHHHH	8 HHLHLHLH
9 LHHLLHHH	9 LHLHHHHH	9 HHHHHHHH	9 HHLHLHLH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH

GGGGGGGGGGGGGGGGGGGGGGGGGGGGGG

0-3	S	BHHHHHHHHH	BHHHHLLHLLF	BHHHLLHHHF	BHHHLLHLLF
4-7		BHLLHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
8-11		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
12-15		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
16-19		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
20-23		BHLLLLLLLL	BHLLHHHHHH	BHLLLLLLLL	BHLLHHHHHH
24-27		BHLLHHHHHH	BHLLLLLLLL	BHHHHHHHHH	BHHHHHHHHH
28-31		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
32-35		BHHHHHHHHH	BHHHHHHLLF	BHHHHHHLLF	BHHHHHHLLF
36-39		BHLLLLLLLL	BHLLHHHHHH	BHLLHHHHLLF	BHLLHHHHLLF
40-43		BHLLHHHHHH	BHLLLLLLLL	BHHHHHHHHH	BHHHHHHHHH
44-47		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
48-51		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
52-55		BHLLLLLLLL	BHLLHHHHHH	BHHHHHHLLF	BHHHHHHLLF
56-59		BHLLHHHHHH	BHLLLLLLLL	BHHHHHHHHH	BHHHHHHHHH
60-63		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
64-67		BHHHHHHHHH	BHLLHHHHHH	BHLLHHHHLLF	BHLLHHHHLLF
68-71		BHLLLLLLLL	BHLLHHHHHH	BHLLHHHHLLF	BHLLHHHHLLF
72-75		BHLLHHHHLLF	BHLLLLLLLL	BHHHHHHHHH	BHHHHHHHHH
76-79		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
80-83		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
84-87		BHLLLLHHH	BHLLHHHHHH	BHLLLLLLLLF	BHHHHHHLLF
88-91		BHHHHHHLLF	BHLLLLLLLL	BHHHHHHHHH	BHHHHHHHHH
92-95		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
96-99		BHHHHHHHHH	BHLLHHHHH	BHHHLLHHH	BHHHLLHHH
100-103		BHLLLLLLLL	BHHHLLHHH	BHHHLLHHH	BHHHLLHHH
104-107		BHHHLLHHH	BHHHLLHHH	BHHHHHHHHH	BHHHHHHHHH
108-111		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
112-115		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
116-119		BHLLLLLLLL	BHLLHHHHHH	BHLLHHHHLLF	BHLLHHHHLLF
120-123		BHLLHHHHHH	BHLLLLLLLL	BHLLHHHHHH	BHLLHHHHHH
124-127		BHLLHHHHHH	BHLLLLLLLL	BHHHHHHHHH	BHHHHHHHHH
128-131		BHHHHHHHHH	BHHHHHHLLF	BHHHHHHLLF	BHHHHHHLLF
132-135		BHLLLLLLLL	BHLLHHHHHH	BHLLHHHHLLF	BHLLHHHHLLF
136-139		BHLLHHHHHH	BHLLHHHHHH	BHHHHHHHHH	BHHHHHHHHH
140-143		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
144-147		BHHHHHHHHH	BHHHHHHHHH	BHHHLLHHH	BHHHHHHHHH
148-151		BHHHLLHHH	BHHHLLHHH	BHHHLLHHH	BHHHLLHHH
152-155		BHHHLLHHH	BHLLLLLLLL	BHHHHHHHHH	BHHHHHHHHH
156-159		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
160-163		BHHHHHHHHH	BHHHHHHHHH	BHHHLLHHH	BHHHHHHHHH
164-167		BHHHLLHHH	BHHHLLHHH	BHHHLLHHH	BHHHLLHHH
168-171		BHHHLLHHH	BHHHLLHHH	BHHHLLHHH	BHHHLLHHH
172-175		BHHHLLHHH	BHHHLLHHH	BHHHHHHHHH	BHHHHHHHHH
176-179		BHHHHHHHHH	BHHHHHLLH	BHHHHHLLH	BHHHHHLLH
180-183		BHHHLLHHH	BHHHLLHHH	BHHHLLHHH	BHHHLLHHH
184-187		BHHHLLHHH	BHHHLLHHH	BHHHHHHHHH	BHHHHHHHHH
188-191		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
192-195		BHHHHHHHHH	BHHHLLHHH	BHHHLLHHH	BHHHLLHHH
196-199		BHHHLLHHH	BHHHLLHHH	BHHHLLHHH	BHHHLLHHH
200-203		BHHHLLHHH	BHLLLLLLLL	BHHHHHHHHH	BHHHHHHHHH
204-207		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
208-211		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
212-215		BHLLLLLLLL	BLHLLHHH	BLHLLHHH	BLHLLHHH
216-219		BLHLLHHH	BLHLLHHH	BHHHHHHHHH	BHHHHHHHHH
220-223		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
224-227		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
228-231		BHLLLLLLLL	BHLLHHHHHH	BHLLHHHHHH	BHLLHHHHHH
232-235		BHLLHHHHHH	BHLLHHHHHH	BHHHHHHHHH	BHHHHHHHHH
236-239		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
240-243		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH
244-247		BHLLLLLLLL	BHLLHHHHHH	BHLLHHHHHH	BHLLHHHHHH
248-251		BHLLHHHHHH	BHLLLLLLLL	BHHHHHHHHH	BHHHHHHHHH
252-255		BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH	BHHHHHHHHH

E

MATH SYMBOL SET (SPACE)=7 (40-77B)

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1 X X X	1 X	1 X X X	1 X X X
2 X X	2 X X	2 X X X	2 X X X
3 X X	3 X	3 X X	3 X X
4 X X	4 X	4 X X	4 X X
5 X X	5 X	5 X X X X	5 X X X
6 X X X	6 X X X	6 X X X X	6 X X X
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1 X	1 X X X X	1 X X X	1 X X X X
2 X X	2 X	2 X	2 X X X
3 X X	3 X X X	3 X	3 X X
4 X X X X	4 X X X	4 X X X X	4 X X X
5 X X	5 X X X	5 X X X	5 X X
6 X	6 X X X	6 X X X X	6 X
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1 X X X	1 X X X X	1 X X X X X	1 X X X X X X X
2 X X	2 X X X	2 X X X X	2 X X X X X X
3 X X X	3 X X X X	3 X X X X X	3 X X X X X X
4 X X X	4 X X X X	4 X X X X X	4 X X X X X X
5 X X X	5 X X X	5 X X X X	5 X X X X X X
6 X X X	6 X X X	6 X X X X	6 X X X X X X
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1 X X X	1 X X X X	1 X X X X X	1 X X X X X X X
2 X X	2 X X X	2 X X X X	2 X X X X X X
3 X X X	3 X X X X	3 X X X X X	3 X X X X X X
4 X X X	4 X X X X	4 X X X X X	4 X X X X X X
5 X X X	5 X X X	5 X X X X	5 X X X X X X
6 X X X	6 X X X	6 X X X X	6 X X X X X X
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
0	0	0	0
1	1 X	1 X	1 X X X X X X X
2	2 X	2 X	2 X X X X X X
3	3 X	3 X	3 X X X X X X
4	4 X	4 X	4 X X X X X X
5 X X X X X	5 X	5 X X X X X X	5 X X X X X X
6 X X X X X	6 X X X	6 X X X X X X	6 X X X X X X
7 X X X X X	7 X X X	7 X X X X X X	7 X X X X X X
8 X X X X X	8 X X X	8 X X X X X X	8 X X X X X X
9	9 X X	9 X	9 X X X X X X
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14

MATH SYMBOL SET (SPACE)-7 (40-77B)

01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHLHHH	0 HHHHHHHH
1 HHHHHHHH	1 HHHHHHHH	1 HHHHLHHH	1 HHHLLLHH
2 HHHHHHHH	2 LHHHHHLH	2 HHHHLHHH	2 LHLHHHHH
3 HHHHHHHH	3 HHHHHHLH	3 HHHHLHHH	3 LHLHHHHH
4 HHHHHHHH	4 LHHHHLHH	4 HHHHLHHH	4 LHLLLLHH
5 HHHHHHHH	5 HHHHLHHH	5 HHHHLHHH	5 HHLHHHLH
6 HHHHHHHH	6 LHHHLHHH	6 HHHHLHHH	6 LHLLLLHH
7 HHHHHHHH	7 HLLHLHHH	7 HHHHLHHH	7 LHHHLHHH
8 HHHHHHHH	8 LLLHLHHH	8 HHHHLHHH	8 LHHHLHHH
9 HHHHHHHH	9 HLLHHHHH	9 HHHHLHHH	9 HHLLLLHH
10 HHHHHHHH	10 LHLHHHHH	10 HHHHLHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHLHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHLHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHLHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHLHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHHHHHHH	1 HHHHHHHH	1 HHHHHHHH	1 HHHHHLLH
2 HHHHHHHH	2 HHHHLHHH	2 HHHHHHLH	2 LHHHLLLH
3 HLLLLLHL	3 HHHHLHHH	3 HHLLLLHL	3 HHHHLHHH
4 LHHHHHLH	4 HHLLLLHL	4 LLLHLHHH	4 HHHHLHHH
5 HHLHHHLH	5 HHHHLHHH	5 LLLHLHHH	5 HHHHLHHH
6 LHLHHLHH	6 HHHHLHHH	6 LLLHLHHH	6 HHHHLHHH
7 HHLHHLHH	7 HHHHHHHH	7 HHLLLLHL	7 HHHHLHHH
8 LHHLLLHH	8 HHLLLLHL	8 HHHHHHLH	8 HHHHLHHH
9 HHHHLHHH	9 HHHHHHHH	9 HHHHHHHH	9 HHHHLHHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHLHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHLHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHLHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHLHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHLHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
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01234567	01234567	01234567	01234567
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2 HLHHLHHH	2 HLHHHHHH	2 HLHHHHHH	2 HHHHLHHH
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GGGGGGGGGGGGGGGGGGGGGGGGGGGGGG

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172-175		0000000000	0000000000	0000000000	0000000000
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188-191		0000000000	0000000000	0000000000	0000000000
192-195		0000000000	0000000000	0000000000	0000000000
196-199		0000000000	0000000000	0000000000	0000000000
200-203		0000000000	0000000000	0000000000	0000000000
204-207					

256-259	BHHHHHHHHF	BHHHHLLLLF	BHHHLLHHLF	BHHHLLHHLF
260-263	BHHHLLHHLF	BHHHLLHHLF	BHHHLLLLLLF	BHHHHHHHHF
264-267	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
268-271	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
272-275	BHHHHHHHHF	BHHHHHLLHF	BHHHHHLLLF	BHHHHHLLHF
276-279	BHHHHHLLHF	BHHHHHLLHF	BHHHHLLLLF	BHHHHHHHHF
280-283	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
284-287	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
288-291	BHHHHHHHHF	BHHHHLLLLF	BHHHLLHHLF	BHHHHLLHHF
292-295	BHHHLLHHF	BHHHHHHHLLF	BHHHLLLLHF	BHHHHHHHHF
296-299	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
300-303	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
304-307	BHHHHHHHHF	BHHHHLLLLF	BHHHLLHHHF	BHHHHLLHHF
308-311	BHHHLLHHHF	BHHHLLHHHF	BHHHHLLLLF	BHHHHHHHHF
312-315	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
316-319	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
320-323	BHHHHHHHHF	BHHHHHHHLLF	BHHHHLLHF	BHHHHLLHF
324-327	BHHHLLLLHF	BHHHHLLHHF	BHHHHLLHHF	BHHHHHHHHF
328-331	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
332-335	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
336-339	BHHHHHHHHF	BHHHLLLLHF	BHHHHHLLHF	BHHHLLLLHF
340-343	BHHHLLHHHF	BHHHLLHHLF	BHHHHLLLLF	BHHHHHHHHF
344-347	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
348-351	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
352-355	BHHHHHHHHF	BHHHHLLLLF	BHHHHHLLHF	BHHHHHLLHF
356-359	BHHHLLLLHF	BHHHLLHHLF	BHHHLLLLHF	BHHHHHHHHF
360-363	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
364-367	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
368-371	BHHHHHHHHF	BHHHLLLLHF	BHHHLLHHHF	BHHHHLLHHF
372-375	BHHHLLHHHF	BHHHHHLLHF	BHHHHHLLHF	BHHHHHHHHF
376-379	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
380-383	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
384-387	BHHHHHHHHF	BHHHLLLLLF	BHHHLLHHLF	BHHHLLLLLF
388-391	BHHHLLHHLF	BHHHLLHHLF	BHHHHLLLLF	BHHHHHHHHF
392-395	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
396-399	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
400-403	BHHHHHHHHF	BHHHLLLLHF	BHHHLLHHLF	BHHHLLLLHF
404-407	BHHHLLHHHF	BHHHLLHHHF	BHHHHLLLLF	BHHHHHHHHF
408-411	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
412-415	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
416-419	BHHHHHHHHF	BHLLLLHHF	BHLLHHHLLHF	BHLLHHHLLF
420-423	BHLLHHHLLF	BHLLHHHLLHF	BHLLHHHLLF	BHLLHHHLLF
424-427	BHLLHHHLLHF	BHLLHHHLLF	BHHHHHHHHF	BHHHHHHHHF
428-431	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
432-435	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHLLHHHF
436-439	BHHHLLHHLF	BHHLHLLHHF	BHHLHHHLLF	BHLLHHHLLHF
440-443	BHLLHHHLLF	BLLHHHLLHF	BHHHHHHHHF	BHHHHHHHHF
444-447	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
448-451	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
452-455	BHHHHHHHHF	BHLLHLLHHF	BHLHLLHLLF	BHLHLLHLLF
456-459	BHLLHLLHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
460-463	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
464-467	BHHHLLHHHF	BHHHLLHHHF	BHHHLLHHHF	BHHHLLHHHF
468-471	BHHHLLHHHF	BHHHLLHHHF	BHHHLLHHHF	BHHHLLHHHF
472-475	BHHHHLLLLF	BHHHHLLHHF	BHHHHHHHHF	BHHHHHHHHF
476-479	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
480-483	BHHHHHHHHF	BHHHLLHHHF	BHHHLLHHLF	BHHHLLHHHF
484-487	BHLLLLLLHF	BHHHLLHHHF	BHHHLLHHHF	BHHHLLHHHF
488-491	BHHHLLHHHF	BHHHLLHHHF	BHHHHHHHHF	BHHHHHHHHF
492-495	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
496-499	BHHHHHHHHF	BLLLLLLLLF	BLLHHHLLHF	BHHHHLLHHF
500-503	BHHHLLHHHF	BHHLHHHHHF	BHHHLLHHHF	BHHHLLHHHF
504-507	BLLHHHLLHF	BLLLLLLLLF	BHHHHHHHHF	BHHHHHHHHF
508-511	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF E

MATH SYMBOL SET @=(UNDERLINE) (100-137B)

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13	13	13	13
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MATH SYMBOL SET @-(UNDERLINE) (100-137B)

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2 LLLLLLHH	2 HHHHHHHH	2 LHLHHLHH	2 HHHHHHHH
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4 LHLHLHHH	4 LHLLLLLH	4 LLHHHLHH	4 LHHHLHHH
5 LHHHLHHH	5 LLHHHLHH	5 LLHLLLLL	5 HLLHHLHH
6 LHHHLHHH	6 LLHHHLHH	6 LLHHHHHL	6 HLLHHLHH
7 LHHHLHHH	7 LLHHHLHH	7 LLHHHHHL	7 LLHLHLHH
8 LHHHLHHH	8 LLHHHLHH	8 LLHHHHHL	8 HLLHHLHH
9 LHHHLHHH	9 LHLLLLLH	9 LLLLLLHH	9 LHLLLLLH
10 HHHHHHHH	10 HHHHHHHH	10 LLHHHHHH	10 HHLHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 LLHHHHHH	11 LLHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
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14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
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01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHHHHHLH	1 HHHHHHHH	1 LHHLLHHH	1 HHLHHHHH
2 LHHHHLHH	2 HHHHHHHH	2 LHLHHLHH	2 HHHLLHHH
3 HHHLLLLH	3 HHHHHHHH	3 HHHHHHLH	3 LHHLLHHH
4 LHLHLHHH	4 HHHLLLLL	4 HHHHHHLH	4 HHHHLHHH
5 HHLHLHLH	5 LHLHHHHH	5 HHLLLHLH	5 LHHLLHHH
6 HHLHLHLH	6 HHLLLLLH	6 HLLHHHLH	6 HHHLLHHH
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8 HHLLLLLH	8 LHLHHHHH	8 HLLHHHLH	8 HHLHHHLH
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13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHHHHHHH	1 HHHHHHHH	1 HHHHHHHH	1 HHHHHHHH
2 HHHHHHHH	2 HHHHHHHH	2 HHHHHHHH	2 HHHHHHHH
3 HHHHHHHH	3 HHHHHHHH	3 HHHHHHHH	3 HHHHHHHH
4 HHLHHHLH	4 LHLHHHLH	4 LLLHHHLH	4 HHHLLLLH
5 LLHHHHHL	5 LHLHHHLH	5 LHLHHHLH	5 LHLHHHLH
6 HLLHHHLH	6 LHLHHHLH	6 LHLHHHLH	6 HHLHHHLH
7 HLLHHHLH	7 LHLHHHLH	7 LHLHHHLH	7 HHLHHHLH
8 LLHLHLHL	8 LHLHHHLH	8 LHLHLHHH	8 HHLHHHLH
9 HLLHLHLH	9 HHLLLLLH	9 LHLHHHHH	9 LLHLLLLL
10 HHHHHHHH	10 LHLHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 LHLHHHHH	11 HHHHHHHH	11 LLHHHHHH
12 HHHHHHHH	12 HHLHHHHH	12 HHHHHHHH	12 LLHHHHHH
13 HHHHHHHH	13 LLHHHHHH	13 HHHHHHHH	13 LLHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 LLHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH

01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHHHHHHH	1 HHHHHHHH	1 HHHLLLLH	1 HHHHHHHH
2 HHHHHHHH	2 HHHHHHHH	2 LHLHHLHH	2 HHHHHHHH
3 HHHHHHHH	3 HHHHHHHH	3 HHLHHHLH	3 HHHHHHHH
4 LLLLLLLLH	4 HLLHHLL	4 HHLHHHLH	4 HHHLLLLH
5 HLLHLHLH	5 LHLHLHLH	5 HHLLLLLH	5 LHLHLHHH
6 HHHHLHLH	6 HHHHLHLH	6 HHLHHHLH	6 HHLHLHLH
7 HHHHLHLH	7 LHHHLHHH	7 HHLHHHLH	7 HHLHLHLH
8 HHHHLHLH	8 LHHHLHLH	8 LHLHLHLH	8 HHLHLHLH
9 LHLHLHLH	9 LHHHLHLH	9 HHHLLLLH	9 LHLHLHHH
10 HHHHHHHH	10 LHHHLHLH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 LHHHLHLH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 LHHHLHLH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHLHLH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHHHHHHH	1 LHLHLHLH	1 HHHHHHHH	1 HHHHLHLH
2 HHHHHHHH	2 HHHLLLLH	2 HHHHHHHH	2 LHHHLHLH
3 HHHHHHHH	3 LHLHHHHH	3 HHHHLHHH	3 LHHHLHHH
4 LLLLLLLLH	4 HHLHHHHH	4 LHHLLLLH	4 HHHHLHHH
5 HLLHLHLH	5 HHLHLHLH	5 HHHHLHLH	5 LHLLLHHH
6 HHHHLHHH	6 HHLLLLLH	6 LHLHLHLH	6 HHLHHHLH
7 HHHHLHHH	7 HHLHHHHH	7 HHLHHHLH	7 HHLHLHLH
8 HHHHLHHH	8 HHLHHHHH	8 LHHHHHLH	8 HHLHLHLH
9 LHHHLHHH	9 LHLLLLLH	9 HLLLLLLL	9 LHLLLHHH
10 HHHHHHHH	10 HHHHHHLH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 LHHLLLLH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHHHHHHH	1 HHHHHHHH	1 LHLHHHHH	1 HHHHLHHH
2 HHHHHHHH	2 HHHHHHHH	2 LHLHLHLH	2 HHHLLLLH
3 HLLHHHLH	3 HHHHHHHH	3 HHHLLLLH	3 HHLLLLLH
4 LHLHHLHH	4 HLLHHHHH	4 LHLHHHHH	4 HHHHLHHH
5 HHHHLHLH	5 LHLHHHLH	5 HHLHHHHH	5 HHHHLHHH
6 LHHLLHHH	6 HHHHLHLH	6 HHLHHHHH	6 HHHHLHHH
7 HHHHLHHH	7 HHHHLHLH	7 HHLHHHHH	7 HHHHLHHH
8 LHHLLHHH	8 HHHHLHLH	8 HHLHHHHH	8 HHHHLHHH
9 HHHHLHLH	9 LHHLLLLH	9 HHLLLLLH	9 HHHHLHHH
10 LHLHHLHH	10 HHHHHHHH	10 LHHHHHLH	10 HHHHHHHH
11 HHLHHHLH	11 HHHHHHHH	11 HHHHLHLH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH	0 HHHHHHHH
1 HHHHHHHH	1 HHLHLHLH	1 HHHHHHHH	1 HHHHLHHH
2 HHHHHHHH	2 LHLHLHLH	2 HHHHHHHH	2 HHHHLHHH
3 HHHHLHLH	3 HLLHHHLH	3 HHHHLHHH	3 HHHHLHHH
4 HHHHLHLH	4 HHHHLHHH	4 HHLHHHHH	4 HHHHLHHH
5 HLLLLLLL	5 HHHHLHHH	5 HLLLLLLL	5 HHHHLHHH
6 HHHHLHLH	6 HHHHLHHH	6 HHLHHHHH	6 HHHHLHHH
7 HHHHLHLH	7 HHHHLHHH	7 HHHHLHHH	7 HHLLLLLH
8 HHHHHHHH	8 HHHHLHHH	8 HHHHHHHH	8 HHHLLLLH
9 HHHHHHHH	9 HHHLLLLH	9 HHHHHHHH	9 HHHHLHHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH

G G G G G G G G G G G G G G G G G G

0-3	S	BHHHHHHHMF	BHLLLLLLHF	BHHLHLLLFF	BHHLHLLLFF
4-7		BHMLHLLHMF	BHMLHLLHMF	BHMLHLLHMF	BHMLHLLHMF
8-11		BHMLHLLHMF	BHMLHLLHMF	BHHHHHHHMF	BHHHHHHHMF
12-15		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
16-19		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
20-23		BHMLLHLLHF	BHMLHMHLLF	BHMLHMHLLF	BHMLHMHLLF
24-27		BHMLHMHLLF	BHLLLLLLHF	BHHHHHHHMF	BHHHHHHHMF
28-31		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
32-35		BHHHHHHHMF	BHMLLHMHMF	BHMLHMHLLF	BHMLHMHLLF
36-39		BHMLHMHLLF	BHMLLHLLHF	BHMLHMHLLF	BHMLHMHLLF
40-43		BHMLHMHLLF	BHMLLLLLLF	BHHHHHHHMF	BHHHHHHHMF
44-47		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
48-51		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHMLHMHMF
52-55		BHMLHMHLLF	BLHMLHMHMF	BLHMLHMHMF	BHMLHMHLLF
56-59		BHMLHMHMF	BHMLLLLLHF	BHHHHHLMHF	BHHHHHMLLF
60-63		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
64-67		BHHHHHHHMF	BHMLHMHMHMF	BHMLHMHMHMF	BHMLLHMHMF
68-71		BHMLLHMLHF	BHMLHMLHMF	BHMLHMLHMF	BHMLHMLHMF
72-75		BHMLLHMHMF	BHHHHHMLHF	BHHHHHLMHF	BHHHHHHHMF
76-79		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
80-83		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
84-87		BHMLLHMHMF	BHHHHHMLHF	BHMLLHLMHF	BHHHHHMLHF
88-91		BHHHHHMLHF	BHMLLHMHMF	BHHHHHHHMF	BHHHHHHHMF
92-95		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
96-99		BHHHHHHHMF	BHMLLHMHMF	BHMLHMLHMF	BHMLHMHMHMF
100-103		BHMLHMHMHMF	BHMLHMLHMF	BHMLHMHMHMF	BHMLHMHMHMF
104-107		BHMLHMHMHMF	BHMLLLLLHF	BHHHHHHHMF	BHHHHHHHMF
108-111		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
112-115		BHHHHHHHMF	BHHHHHMLHMF	BHHHHHLMHF	BHHHHHMLHMF
116-119		BHMLHMHMHMF	BHMLLHMHMF	BHMLHMLHMF	BHMLHMLHMF
120-123		BHMLHMHMHMF	BHMLHMHLLF	BHHHHHHHMF	BHHHHHHHMF
124-127		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
128-131		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
132-135		BHMLLHMLHF	BHMLHMLHMF	BHMLHMLHMF	BHMLHMLHMF
136-139		BHMLHMLHMF	BHMLHMLHMF	BHMLHMHMHMF	BHHHHHHHMF
140-143		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
144-147		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
148-151		BHHHHHMLHMF	BHHHHHMLHMF	BHHHHHLMHF	BHHHHHMLHMF
152-155		BHMLHMLHMF	BHMLLHMHMF	BHHHHHHHMF	BHHHHHHHMF
156-159		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
160-163		BHHHHHHHMF	BHMLLLLLHF	BHMLHMLHMF	BHMLHMHLLF
164-167		BLHHHHHMLHF	BLLLLLLLHF	BLHHHHHMLHF	BHMLHMHLLF
168-171		BHMLHMLHMF	BHMLLLLLHF	BHHHHHHHMF	BHHHHHHHMF
172-175		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
176-179		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
180-183		BHMLHMLHMF	BHMLHMLHMF	BHMLLHMHMF	BHMLHMLHMF
184-187		BHMLHMLHMF	BHMLHMLHMF	BHHHHHHHMF	BHHHHHHHMF
188-191		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
192-195		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
196-199		BHMLHMLHMF	BHMLHMHLLF	BLHMLHMHMF	BLHMLHMLHF
200-203		BHMLHMLHMF	BHMLHMLHMF	BHHHHHHHMF	BHHHHHHHMF
204-207		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
208-211		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
212-215		BHMLHMLHMF	BHMLHMLHMF	BHMLHMLHMF	BHMLHMLHMF
216-219		BHMLHMLHMF	BHMLLHMHMF	BHHHHHMLHF	BHHHHHMLHF
220-223		BHHHHHLMHF	BHHHHHMLLF	BHHHHHHHMF	BHHHHHHHMF
224-227		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
228-231		BHMLHMLLLF	BHMLHMLHMF	BHMLHMLHMF	BHMLHMLHMF
232-235		BHMLHMLHMF	BHHHHHLLHF	BHHHHHHHMF	BHHHHHHHMF
236-239		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
240-243		BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF	BHHHHHHHMF
244-247		BHMLLHMHMF	BHMLHMLHMF	BHMLHMLHMF	BHMLHMLHMF
248-251		BHMLHMLHMF	BHMLLLLLHF	BHHHHHHHMF	BHHHHHHHMF
252-255		BHHHHHHHMF	BHHHHHHHMF	BHHHHHMLLF	BHHHHHHHMF

256-259	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
260-263	BHLLLLLLLF	BHHHLHLHLF	BHHHLHLHLF	BHHHLHLHLF
264-267	BHHHLHLHLF	BHHHLHLHLF	BHHHHHHHHF	BHHHHHHHHF
268-271	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
272-275	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
276-279	BLHHHLHLF	BHHHLHLHLF	BHHLLHHHHF	BHHHLHHHLF
280-283	BHHHLHLHLF	BHHHLHLHLF	BHHHLHLHLF	BHHHLHLHLF
284-287	BHHHLHLHLF	BHHLLHHHHF	BHHHHHHHHF	BHHHHHHHHF
288-291	BHHHHHHHHF	BHHLLHHHHF	BHHLHHHLF	BHLHHHLHLF
292-295	BHLHHHLHLF	BHLLLLLLLF	BHLHHHLHLF	BHLHHHLHLF
296-299	BHHHLHHHLF	BHHLLHHHHF	BHHHHHHHHF	BHHHHHHHHF
300-303	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
304-307	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
308-311	BHLLLLLLLF	BHHHLHLHLF	BHHLHHHLF	BHHLHHHLF
312-315	BHHHLHHHLF	BHHHLHLHLF	BHHHHHHHHF	BHHHHHHHHF
316-319	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
320-323	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
324-327	BHLLLLLLLF	BHHHLHHHLF	BHHHLHHHHF	BHHHLHHHHF
328-331	BHHHLHHHHF	BHHHLHHHLF	BHHHHHHHHF	BHHHHHHHHF
332-335	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
336-339	BHHHHHHHHF	BHHLLHLHLF	BHHLLHHHHF	BHHHHHLHLF
340-343	BHHHHHLHLF	BHHLLHLHLF	BHHLLLLHHF	BHHHHHLHLF
344-347	BHHHHHLHLF	BHHLLLLHLF	BHLHHHHHHF	BHHLLHHHLF
348-351	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
352-355	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHLHHHHF
356-359	BHHHLHLHLF	BHHHLHLHLF	BHHLHHHLF	BHLHHHLHLF
360-363	BHLHHHLHLF	BLLLLLLLLLF	BHHHHHHHHF	BHHHHHHHHF
364-367	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
368-371	BHHHHHHHHF	BHHLLHHHHF	BHHHLHLHLF	BHHHLHLHLF
372-375	BHHHLHHHHF	BHHHLLLHLF	BHHLHHHLF	BHHLHHHLF
376-379	BHHHLHHHLF	BHHHLLLHLF	BHHHHHHHHF	BHHHHHHHHF
380-383	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
384-387	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHLHHHLHLF
388-391	BHHHLHLHLF	BHHHLHLHLF	BHHHLHLHLF	BHHHLHHHHF
392-395	BHHHLHLHLF	BHHHLHLHLF	BHHHLHLHLF	BLHHHLHLF
396-399	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
400-403	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
404-407	BLHHHLHLF	BHLHHHLHLF	BHLHHHLHLF	BHLHHHLHLF
408-411	BHLHHHLHLF	BHHLLHHHLF	BHHHHHHHHF	BHHHHHHHHF
412-415	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
416-419	BHHHHHHHHF	BHHHHHLHLF	BHHLLHLHLF	BHHLLHHHHF
420-423	BHHHHHLHLF	BHHHHHLHLF	BHHHHHLHLF	BHHHHHLHLF
424-427	BHHHHHLHLF	BHLLLLLLLF	BHLHHHHHLF	BHLLHHHHF
428-431	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
432-435	BHHHHHHHHF	BHHHLHHHHF	BHHLLHHHHF	BHLLLLLLLF
436-439	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF
440-443	BHHHLHHHHF	BHHHLHHHHF	BHHHHHHHHF	BHHHHHHHHF
444-447	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
448-451	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHLHHHHHHF
452-455	BHLLHHHHHHF	BLLLLLLLLLF	BHLLHHHHHHF	BHHLHHHHHHF
456-459	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
460-463	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
464-467	BHHHHHHHHF	BHLHLHLHLF	BHLHLHLHLF	BLHHHLHLF
468-471	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF
472-475	BHHHLHHHHF	BHHLLHHHHF	BHHHHHHHHF	BHHHHHHHHF
476-479	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
480-483	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHLHHF
484-487	BHHHHLLHHF	BLLLLLLLLLF	BHHHHLLHHF	BHHHHLLHHF
488-491	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
492-495	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
496-499	BHHHHHHHHF	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF
500-503	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF	BHLLLLLLLF
504-507	BHHLLHHHHF	BHHHLHHHHF	BHHHHHHHHF	BHHHHHHHHF
508-511	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF

E

LINE DRAWING SET BITS 0-7 (SPACE)-7 (40-77B)

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
0	0 1 2 3 4 5 6 7 8	1	0 1 2 3 4 5 6 7 8
0		0	
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	
10		10	
11		11	
12		12	
13		13	
14		14	

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
2	0 1 2 3 4 5 6 7 8	3	0 1 2 3 4 5 6 7 8
0		0	
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	
10		10	
11		11	
12		12	
13		13	
14		14	

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
4	0 1 2 3 4 5 6 7 8	5	0 1 2 3 4 5 6 7 8
0		0	
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	
10		10	
11		11	
12		12	
13		13	
14		14	

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
6	0 1 2 3 4 5 6 7 8	7	0 1 2 3 4 5 6 7 8
0		0	
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	
10		10	
11		11	
12		12	
13		13	
14		14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
8	
0	x
1	
2	
3	
4	
5	x x x x x x x x
6	
7	
8	
9	x x x x x x x x
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
9	
0	x
1	
2	
3	
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7	
8	
9	
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12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
10	
0	x x x
1	
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3	
4	
5	
6	
7	x x x x x x x x
8	
9	
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
11	
0	x
1	
2	
3	
4	
5	
6	x x x x x x x x
7	x x x x x x x x
8	x x x x x x x x
9	
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
12	
0	
1	
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3	
4	
5	
6	
7	x x x x x x x x
8	
9	
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
13	
0	x
1	
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3	
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8	
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11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
14	
0	x
1	
2	
3	
4	
5	
6	
7	
8	
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11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
15	
0	x
1	
2	
3	
4	
5	
6	
7	x x x x x x x x
8	
9	
10	
11	
12	
13	
14	

LINE DRAWING SET BITS 0-8 SPACE)-? (40-77B)

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
16	0 1 2 3 4 5 6 7 8	17	0 1 2 3 4 5 6 7 8
0	X X X	0	X X X
1	X X X	1	X X X
2	X X X	2	X X X
3	X X X	3	X X X
4	X X X	4	X X X
5	X X X	5	X X X
6	X X X X X X X X	6	X X X X X X
7	X X X X X X X X	7	X X X X X X
8	X X X X X X X X	8	X X X X X X
9	X X X	9	X X X
10	X X X	10	X X X
11	X X X	11	X X X
12	X X X	12	X X X
13	X X X	13	X X X
14	X X X	14	X X X

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
18	0 1 2 3 4 5 6 7 8	19	0 1 2 3 4 5 6 7 8
0	X X X	0	
1	X X X	1	
2	X X X	2	
3	X X X	3	
4	X X X	4	
5	X X X	5	
6	X X X X X X	6	X X X X X X X X
7	X X X X X X	7	X X X X X X X X
8	X X X X X X	8	X X X X X X X X
9	X X X	9	X X X
10	X X X	10	X X X
11	X X X	11	X X X
12	X X X	12	X X X
13	X X X	13	X X X
14	X X X	14	X X X

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
20	0 1 2 3 4 5 6 7 8	21	0 1 2 3 4 5 6 7 8
0	X X X	0	X
1	X X X	1	X
2	X X X	2	X
3	X X X	3	X
4	X X X	4	X
5	X X X	5	X
6	X X X X X X X X	6	X
7	X X X X X X X X	7	X X X X X
8	X X X X X X X X	8	X
9		9	X
10		10	X
11		11	X
12		12	X
13		13	X
14		14	X

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
22	0 1 2 3 4 5 6 7 8	23	0 1 2 3 4 5 6 7 8
0	X	0	
1	X	1	
2	X	2	
3	X	3	
4	X	4	
5	X	5	
6	X	6	
7	X X X X X	7	X X X X X X X X
8	X	8	X
9	X	9	X
10	X	10	X
11	X	11	X
12	X	12	X
13	X	13	X
14	X	14	X

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
24	
0	X
1	X
2	X
3	X
4	X
5	X
6	X
7	X X X X X X X X
8	
9	
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
25	
0	
1	
2	
3	
4	
5	X X X X X X X X
6	
7	
8	
9	X X X X X X X X
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
26	
0	X X X
1	X X X
2	X X X
3	X X X
4	X X X
5	X X X
6	X X X
7	X X X
8	X X X
9	X X X
10	X X X
11	X X X
12	X X X
13	X X X
14	X X X

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
27	
0	
1	
2	
3	
4	
5	
6	X X X X X X X X
7	X X X X X X X X
8	X X X X X X X X
9	
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
28	
0	X
1	X
2	X
3	X
4	X
5	X
6	X
7	X X X X X X X X
8	X
9	X
10	X
11	X
12	X
13	X
14	X

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
29	
0	X X X X X
1	X
2	X
3	X
4	X
5	X
6	X
7	X
8	X
9	X
10	X
11	X
12	X
13	X
14	X

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
30	
0	X
1	X
2	X
3	X
4	X
5	X X X X X X X X
6	X
7	X
8	X
9	X X X X X X X X
10	X
11	X
12	X
13	X
14	X

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
31	
0	X
1	X
2	X
3	X
4	X
5	X X X X X X X X
6	X
7	X
8	X
9	X X X X X X X X
10	X
11	X
12	X
13	X
14	X

LINE DRAWING SET BITS 0-7 (SPACE)-? (40-778)

01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHLLLLH	0 HHHLLLLH	0 HHHHHHHH
1 HHHHHHHH	1 HHHLLLLH	1 HHHLLLLH	1 HHHHHHHH
2 HHHHHHHH	2 HHHLLLLH	2 HHHLLLLH	2 HHHHHHHH
3 HHHHHHHH	3 HHHLLLLH	3 HHHLLLLH	3 HHHHHHHH
4 HHHHHHHH	4 HHHLLLLH	4 HHHLLLLH	4 HHHHHHHH
5 HHHHHHHH	5 HHHLLLLH	5 HHHLLLLH	5 HHHHHHHH
6 HHHHHHHH	6 HHHLLLLH	6 HHHLLLLH	6 LLLLLLLL
7 HHHHHHHH	7 HHHLLLLL	7 LLLLLLLH	7 LLLLLLLL
8 HHHHHHHH	8 HHHLLLLH	8 HHHLLLLH	8 LLLLLLLL
9 HHHHHHHH	9 HHHLLLLH	9 HHHLLLLH	9 HHHHLHHH
10 HHHHHHHH	10 HHHLLLLH	10 HHHLLLLH	10 HHHHLHHH
11 HHHHHHHH	11 HHHLLLLH	11 HHHLLLLH	11 HHHHLHHH
12 HHHHHHHH	12 HHHLLLLH	12 HHHLLLLH	12 HHHHLHHH
13 HHHHHHHH	13 HHHLLLLH	13 HHHLLLLH	13 HHHHLHHH
14 HHHHHHHH	14 HHHLLLLH	14 HHHLLLLH	14 HHHHLHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHLHHH	0 HHLHHHLH	0 HHLHHHLH	0 HHHHHHHH
1 HHHHLHHH	1 HHLHHHLH	1 HHLHHHLH	1 HHHHHHHH
2 HHHHLHHH	2 HHLHHHLH	2 HHLHHHLH	2 HHHHHHHH
3 HHHHLHHH	3 HHLHHHLH	3 HHLHHHLH	3 HHHHHHHH
4 HHHHLHHH	4 HHLHHHLH	4 HHLHHHLH	4 HHHHHHHH
5 HHHHLHHH	5 HHLHHHLH	5 HHLHHHLH	5 LLLLLLLL
6 LLLLLLLL	6 HHLHHHLH	6 HHLHHHLH	6 HHHHHHHH
7 LLLLLLLL	7 HHLHHHLH	7 LLLHHHLH	7 HHHHHHHH
8 LLLLLLLL	8 HHLHHHLH	8 HHLHHHLH	8 HHHHHHHH
9 HHHHHHHH	9 HHLHHHLH	9 HHLHHHLH	9 LLLLLLLL
10 HHHHHHHH	10 HHLHHHLH	10 HHLHHHLH	10 HHHHLHHH
11 HHHHHHHH	11 HHLHHHLH	11 HHLHHHLH	11 HHHHLHHH
12 HHHHHHHH	12 HHLHHHLH	12 HHLHHHLH	12 HHHHLHHH
13 HHHHHHHH	13 HHLHHHLH	13 HHLHHHLH	13 HHHHLHHH
14 HHHHHHHH	14 HHLHHHLH	14 HHLHHHLH	14 HHHHLHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHLHHH	0 HHLHHHLH	0 HHHLLLLH	0 HHHHLHHH
1 HHHHLHHH	1 HHLHHHLH	1 HHHLLLLH	1 HHHHLHHH
2 HHHHLHHH	2 HHLHHHLH	2 HHHLLLLH	2 HHHHLHHH
3 HHHHLHHH	3 HHLHHHLH	3 HHHLLLLH	3 HHHHLHHH
4 HHHHLHHH	4 HHLHHHLH	4 HHHLLLLH	4 HHHHLHHH
5 LLLLLLLL	5 HHLHHHLH	5 HHHLLLLH	5 HHHHLHHH
6 HHHHHHHH	6 HHLHHHLH	6 HHHLLLLH	6 LLLLLLLL
7 HHHHHHHH	7 HHLHHHLH	7 LLLLLLLL	7 LLLLLLLL
8 HHHHHHHH	8 HHLHHHLH	8 HHHLLLLH	8 LLLLLLLL
9 LLLLLLLL	9 HHLHHHLH	9 HHHLLLLH	9 HHHHLHHH
10 HHHHHHHH	10 HHLHHHLH	10 HHHLLLLH	10 HHHHLHHH
11 HHHHHHHH	11 HHLHHHLH	11 HHHLLLLH	11 HHHHLHHH
12 HHHHHHHH	12 HHLHHHLH	12 HHHLLLLH	12 HHHHLHHH
13 HHHHHHHH	13 HHLHHHLH	13 HHHLLLLH	13 HHHHLHHH
14 HHHHHHHH	14 HHLHHHLH	14 HHHLLLLH	14 HHHHLHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHHLHHH	0 HHHHLHHH	0 HHHHLHHH
1 HHHHHHHH	1 HHHHLHHH	1 HHHHLHHH	1 HHHHLHHH
2 HHHHHHHH	2 HHHHLHHH	2 HHHHLHHH	2 HHHHLHHH
3 HHHHHHHH	3 HHHHLHHH	3 HHHHLHHH	3 HHHHLHHH
4 HHHHHHHH	4 HHHHLHHH	4 HHHHLHHH	4 HHHHLHHH
5 HHHHHHHH	5 HHHHLHHH	5 HHHHLHHH	5 HHHHLHHH
6 HHHHHHHH	6 HHHHLHHH	6 HHHHLHHH	6 HHHHLHHH
7 LLLLLLLL	7 HHHHLHHH	7 HHHHLHHH	7 LLLLLLLL
8 HHHHHHHH	8 HHHHLHHH	8 HHHHLHHH	8 HHHHLHHH
9 HHHHHHHH	9 HHHHLHHH	9 HHHHLHHH	9 HHHHLHHH
10 HHHHHHHH	10 HHHHLHHH	10 HHHHLHHH	10 HHHHLHHH
11 HHHHHHHH	11 HHHHLHHH	11 HHHHLHHH	11 HHHHLHHH
12 HHHHHHHH	12 HHHHLHHH	12 HHHHLHHH	12 HHHHLHHH
13 HHHHHHHH	13 HHHHLHHH	13 HHHHLHHH	13 HHHHLHHH
14 HHHHHHHH	14 HHHHLHHH	14 HHHHLHHH	14 HHHHLHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH

01234567	01234567	01234567	01234567
0 HHHLLLLH	0 HHHLLLLH	0 HHHLLLLH	0 HHHHHHHH
1 HHHLLLLH	1 HHHLLLLH	1 HHHLLLLH	1 HHHHHHHH
2 HHHLLLLH	2 HHHLLLLH	2 HHHLLLLH	2 HHHHHHHH
3 HHHLLLLH	3 HHHLLLLH	3 HHHLLLLH	3 HHHHHHHH
4 HHHLLLLH	4 HHHLLLLH	4 HHHLLLLH	4 HHHHHHHH
5 HHHLLLLH	5 HHHLLLLH	5 HHHLLLLH	5 HHHHHHHH
6 LLLLLLLL	6 HHHLLLLL	6 LLLLLLHH	6 LLLLLLLL
7 LLLLLLLL	7 HHHLLLLL	7 LLLLLLHH	7 LLLLLLLL
8 LLLLLLLL	8 HHHLLLLL	8 LLLLLLHH	8 LLLLLLLL
9 HHHLLLLH	9 HHHLLLLH	9 HHHLLLLH	9 HHHLLLLH
10 HHHLLLLH	10 HHHLLLLH	10 HHHLLLLH	10 HHHLLLLH
11 HHHLLLLH	11 HHHLLLLH	11 HHHLLLLH	11 HHHLLLLH
12 HHHLLLLH	12 HHHLLLLH	12 HHHLLLLH	12 HHHLLLLH
13 HHHLLLLH	13 HHHLLLLH	13 HHHLLLLH	13 HHHLLLLH
14 HHHLLLLH	14 HHHLLLLH	14 HHHLLLLH	14 HHHLLLLH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHLLLLH	0 HHHHLMHH	0 HHHHLMHH	0 HHHHHHHH
1 HHHLLLLH	1 HHHHLMHH	1 HHHHLMHH	1 HHHHHHHH
2 HHHLLLLH	2 HHHHLMHH	2 HHHHLMHH	2 HHHHHHHH
3 HHHLLLLH	3 HHHHLMHH	3 HHHHLMHH	3 HHHHHHHH
4 HHHLLLLH	4 HHHHLMHH	4 HHHHLMHH	4 HHHHHHHH
5 HHHLLLLH	5 HHHHLMHH	5 HHHHLMHH	5 HHHHHHHH
6 LLLLLLLL	6 HHHHLMHH	6 HHHHLMHH	6 HHHHHHHH
7 LLLLLLLL	7 HHHHLMHH	7 LLLLLLHH	7 LLLLLLLL
8 LLLLLLLL	8 HHHHLMHH	8 HHHHLMHH	8 HHHHLMHH
9 HHHHHHHH	9 HHHHLMHH	9 HHHHLMHH	9 HHHHLMHH
10 HHHHHHHH	10 HHHHLMHH	10 HHHHLMHH	10 HHHHLMHH
11 HHHHHHHH	11 HHHHLMHH	11 HHHHLMHH	11 HHHHLMHH
12 HHHHHHHH	12 HHHHLMHH	12 HHHHLMHH	12 HHHHLMHH
13 HHHHHHHH	13 HHHHLMHH	13 HHHHLMHH	13 HHHHLMHH
14 HHHHHHHH	14 HHHHLMHH	14 HHHHLMHH	14 HHHHLMHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHLMHH	0 HHHHHHHH	0 HHHLLLLH	0 HHHHHHHH
1 HHHHLMHH	1 HHHHHHHH	1 HHHLLLLH	1 HHHHHHHH
2 HHHHLMHH	2 HHHHHHHH	2 HHHLLLLH	2 HHHHHHHH
3 HHHHLMHH	3 HHHHHHHH	3 HHHLLLLH	3 HHHHHHHH
4 HHHHLMHH	4 HHHHHHHH	4 HHHLLLLH	4 HHHHHHHH
5 HHHHLMHH	5 LLLLLLLL	5 HHHLLLLH	5 HHHHHHHH
6 HHHHLMHH	6 HHHHHHHH	6 HHHLLLLH	6 LLLLLLLL
7 LLLLLLLL	7 HHHHHHHH	7 HHHLLLLH	7 LLLLLLLL
8 HHHHHHHH	8 HHHHHHHH	8 HHHLLLLH	8 LLLLLLLL
9 HHHHHHHH	9 LLLLLLLL	9 HHHLLLLH	9 HHHHHHHH
10 HHHHHHHH	10 HHHHHHHH	10 HHHLLLLH	10 HHHHHHHH
11 HHHHHHHH	11 HHHHHHHH	11 HHHLLLLH	11 HHHHHHHH
12 HHHHHHHH	12 HHHHHHHH	12 HHHLLLLH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHHHHH	13 HHHLLLLH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHHHHH	14 HHHLLLLH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHLHHHHL	0 HHHHLLLL	0 HHHHLMHH	0 HHLHHHHL
1 HHLHHHHL	1 HHHHLMHH	1 HHHHLMHH	1 HHLHHHHL
2 HHLHHHHL	2 HHHHLMHH	2 HHHHLMHH	2 HHLHHHHL
3 HHLHHHHL	3 HHHHLMHH	3 HHHHLMHH	3 HHLHHHHL
4 HHLHHHHL	4 HHHHLMHH	4 HHHHLMHH	4 HHLHHHHL
5 HHLHHHHL	5 HHHHLMHH	5 LLLLLLLL	5 LLLLLLLL
6 HHLHHHHL	6 HHHHLMHH	6 HHHHLMHH	6 HHLHHHHL
7 LLLLLLLL	7 HHHHLMHH	7 HHHHLMHH	7 HHLHHHHL
8 HHLHHHHL	8 HHHHLMHH	8 HHHHLMHH	8 HHLHHHHL
9 HHLHHHHL	9 HHHHLMHH	9 LLLLLLLL	9 LLLLLLLL
10 HHLHHHHL	10 HHHHLMHH	10 HHHHLMHH	10 HHLHHHHL
11 HHLHHHHL	11 HHHHLMHH	11 HHHHLMHH	11 HHLHHHHL
12 HHLHHHHL	12 HHHHLMHH	12 HHHHLMHH	12 HHLHHHHL
13 HHLHHHHL	13 HHHHLMHH	13 HHHHLMHH	13 HHLHHHHL
14 HHLHHHHL	14 HHHHLMHH	14 HHHHLMHH	14 HHLHHHHL
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH

[illegible]

256-259	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF
260-263	0HHLLHHHF	0HHLLHHHF	0LLLLLLLF	0LLLLLLLF
264-267	0LLLLLLLF	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF
268-271	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF	0HHHHHHHF
272-275	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF
276-279	0HHLLHHHF	0HHLLHHHF	0LLLLLLHF	0LLLLLLHF
280-283	0LLLLLLHF	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF
284-287	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF	0HHHHHHHF
288-291	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF
292-295	0HHLLHHHF	0HHLLHHHF	0HHLLLLLF	0HHLLLLLF
296-299	0HHLLLLLF	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF
300-303	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF	0HHHHHHHF
304-307	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF
308-311	0HHHHHHHF	0HHHHHHHF	0LLLLLLLF	0LLLLLLLF
312-315	0LLLLLLLF	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF
316-319	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF	0HHHHHHHF
320-323	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF
324-327	0HHLLHHHF	0HHLLHHHF	0LLLLLLLF	0LLLLLLLF
328-331	0LLLLLLLF	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF
332-335	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF
336-339	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF
340-343	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0LLLLHHHF
344-347	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF
348-351	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHHHHHF
352-355	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF
356-359	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHLLLLF
360-363	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF
364-367	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHHHHHF
368-371	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF
372-375	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF	0LLLLLLLF
376-379	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF
380-383	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHHHHHF
384-387	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF
388-391	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0LLLLLLLF
392-395	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF
396-399	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF
400-403	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF
404-407	0HHHHHHHF	0LLLLLLLF	0HHHHHHHF	0HHHHHHHF
408-411	0HHHHHHHF	0LLLLLLLF	0HHHHHHHF	0HHHHHHHF
412-415	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF
416-419	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF
420-423	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF
424-427	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF
428-431	0HHLLHHHF	0HHLLHHHF	0HHLLHHHF	0HHHHHHHF
432-435	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF
436-439	0HHHHHHHF	0HHHHHHHF	0LLLLLLLF	0LLLLLLLF
440-443	0LLLLLLLF	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF
444-447	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF	0HHHHHHHF
448-451	0HLHHHLHF	0HLHHHLHF	0HLHHHLHF	0HLHHHLHF
452-455	0HLHHHLHF	0HLHHHLHF	0HLHHHLHF	0LLLLLLLF
456-459	0HLHHHLHF	0HLHHHLHF	0HLHHHLHF	0HLHHHLHF
460-463	0HLHHHLHF	0HLHHHLHF	0HLHHHLHF	0HHHHHHHF
464-467	0LLLLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF
468-471	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF
472-475	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF
476-479	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHHHHHF
480-483	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF
484-487	0HHHLHHHF	0LLLLLLLF	0HHHLHHHF	0HHHLHHHF
488-491	0HHHLHHHF	0LLLLLLLF	0HHHLHHHF	0HHHLHHHF
492-495	0HHHLHHHF	0HHHLHHHF	0HHHLHHHF	0HHHHHHHF
496-499	0HLHHHLHF	0HLHHHLHF	0HLHHHLHF	0HLHHHLHF
500-503	0HLHHHLHF	0LLLLLLLF	0HLHHHLHF	0HLHHHLHF
504-507	0HLHHHLHF	0LLLLLLLF	0HLHHHLHF	0HLHHHLHF
508-511	0HLHHHLHF	0HLHHHLHF	0HLHHHLHF	0HHHHHHHF E

LINE DRAWING SET BITS 0-8 @-(UNDERLINE) (100-137B)

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
0	0 1 2 3 4 5 6 7 8	1	0 1 2 3 4 5 6 7 8
0	X	0	X X X
1	X	1	X X X
2	X	2	X X X
3	X	3	X X X
4	X	4	X X X
5	X X X X X	5	X X X
6	X	6	X X X X X X
7	X	7	X X X X X X
8	X	8	X X X X X X
9	X X X X X	9	
10	X	10	
11	X	11	
12	X	12	
13	X	13	
14	X	14	

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
2	0 1 2 3 4 5 6 7 8	3	0 1 2 3 4 5 6 7 8
0	X X X	0	X X X X X X X X
1	X X X	1	X X X X X X X X
2	X X X	2	X X X X X X X X
3	X X X	3	X X X X X X X X
4	X X X	4	X X X X X X X X
5	X X X	5	X X X X X X X X
6	X X X X X X	6	X X X X X X X X
7	X X X X X X X X	7	X X X X X X X X
8	X X X X X X	8	X X X X X X X X
9	X X X	9	X X X X X X X X
10	X X X	10	X X X X X X X X
11	X X X	11	X X X X X X X X
12	X X X	12	X X X X X X X X
13	X X X	13	X X X X X X X X
14	X X X	14	X X X X X X X X

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
4	0 1 2 3 4 5 6 7 8	5	0 1 2 3 4 5 6 7 8
0	X X X X X X	0	X X X
1	X X X X X X	1	X X X
2	X X X X X X	2	X X X
3	X X X X X X	3	X X X
4	X X X X X X	4	X X X
5	X X X X X X	5	X X X
6	X X X X X X	6	X X X
7	X X X X X X	7	X X X
8	X X X X X X	8	X X X
9	X X X X X X	9	X X X
10	X X X X X X	10	X X X
11	X X X X X X	11	X X X
12	X X X X X X	12	X X X
13	X X X X X X	13	X X X
14	X X X X X X	14	X X X

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
6	0 1 2 3 4 5 6 7 8	7	0 1 2 3 4 5 6 7 8
0	X	0	X
1	X	1	X
2	X	2	X
3	X	3	X
4	X	4	X
5	X	5	X
6	X	6	X
7	X X X X X	7	X X X X X
8		8	
9		9	
10		10	
11		11	
12		12	
13		13	
14		14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
8	
0	
1	
2	
3	
4	
5	
6	
7	x x x x x x x x
8	
9	
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
9	
0	x x x x x
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	x x x x x
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
10	
0	
1	
2	
3	
4	
5	
6	
7	x x x x x x x x
8	
9	
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
11	
0	
1	
2	
3	
4	
5	
6	
7	x x x x x x x x
8	
9	
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
12	
0	
1	
2	
3	
4	
5	
6	
7	x x x x x x x x
8	
9	
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
13	
0	
1	
2	
3	
4	
5	
6	x x x x x x x x
7	x x x x x x x x
8	x x x x x x x x
9	
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
14	
0	
1	
2	
3	
4	
5	
6	x x x x x x x x
7	x x x x x x x x
8	x x x x x x x x
9	
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
15	
0	x x x x x
1	
2	
3	
4	
5	x x x x x
6	
7	
8	
9	
10	x x x x x
11	
12	
13	
14	

LINE DRAWING SET BITS 0-8 @-(UNDERLINE) (100-137B)

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8		0 1 2 3 4 5 6 7 8
16		17	
0	X	0	
1	X	1	
2	X	2	
3	X	3	
4	X	4	
5	X	5	
6	X	6	X X X X X X
7	X	7	X X X X X X
8	X	8	X X X X X X
9	X	9	X X X
10	X	10	X X X
11	X	11	X X X
12	X	12	X X X
13	X	13	X X X
14	X X X X X	14	X X X

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8		0 1 2 3 4 5 6 7 8
18		19	
0		0	X X X
1		1	X X X
2		2	X X X
3		3	X X X
4		4	X X X
5		5	X X X
6		6	X X X X X X
7	X X X X X	7	X X X X X X
8	X	8	X X X X X X
9	X	9	
10	X	10	
11	X	11	
12	X	12	
13	X	13	
14	X	14	

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8		0 1 2 3 4 5 6 7 8
20		21	
0		0	X
1		1	X
2		2	X
3		3	X
4		4	X
5		5	X X X X X
6		6	X
7	X X X X X	7	X
8	X	8	X
9	X	9	X
10	X	10	X
11	X	11	X
12	X	12	X
13	X	13	X
14	X	14	X

CHARACTER	DOT COLUMN	CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8		0 1 2 3 4 5 6 7 8
22		23	
0	X X X	0	
1	X X X	1	
2	X X X	2	
3	X X X	3	
4	X X X	4	
5	X X X	5	
6	X X X X X X	6	X X X X X X
7	X X X X X X X	7	X X X X X X
8	X X X X X X	8	X X X X X X
9	X X X	9	X X X
10	X X X	10	X X X
11	X X X	11	X X X
12	X X X	12	X X X
13	X X X	13	X X X
14	X X X	14	X X X

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
24	
0	
1	
2	
3	
4	
5	X X X X X X X X X
6	X X X X X X X X X
7	X X X X X X X X X
8	X X X X X X X X X
9	X X X X X X X X X
10	X X X X X X X X X
11	X X X X X X X X X
12	X X X X X X X X X
13	X X X X X X X X X
14	X X X X X X X X X

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
25	
0	X X X X X
1	X
2	X
3	X
4	X
5	X
6	X
7	X
8	X
9	X
10	X
11	X
12	X
13	X
14	X

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
26	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	X X X X X X X X X
11	X X X X X X X X X
12	X X X X X X X X X
13	X X X X X X X X X
14	X X X X X X X X X

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
27	
0	X
1	X
2	X
3	X
4	X
5	X X X X X
6	X
7	X
8	X
9	X X X X X
10	X
11	X
12	X
13	X
14	X

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
28	
0	
1	
2	
3	
4	
5	
6	
7	X X X X X X X
8	
9	
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
29	
0	X X
1	X X
2	X X
3	X X
4	X X
5	X X
6	X X
7	X X X X X X X X X
8	
9	
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
30	
0	
1	
2	
3	
4	
5	
6	
7	X X X
8	
9	
10	
11	
12	
13	
14	

CHARACTER	DOT COLUMN
	0 1 2 3 4 5 6 7 8
31	
0	
1	
2	
3	
4	
5	
6	
7	X X X X X X X X X
8	X X
9	X X
10	X X
11	X X
12	X X
13	X X
14	X X

LINE DRAWING SET BITS 0-7 @-(UNDERLINE) (100-1378)

01234567	01234567	01234567	01234567
0 HHHHLLHH	0 HHHLLLHH	0 HHHLLLHH	0 LLLLLLLL
1 HHHHLLHH	1 HHHLLLHH	1 HHHLLLHH	1 LLLLLLLL
2 HHHHLLHH	2 HHHLLLHH	2 HHHLLLHH	2 LLLLLLLL
3 HHHHLLHH	3 HHHLLLHH	3 HHHLLLHH	3 LLLLLLLL
4 HHHHLLHH	4 HHHLLLHH	4 HHHLLLHH	4 LLLLLLLL
5 HHHHLLLL	5 HHHLLLHH	5 HHHLLLHH	5 LLLLLLLL
6 HHHHLLHH	6 HHHLLLLL	6 LLLLLLLH	6 LLLLLLLL
7 HHHHLLHH	7 HHHLLLLL	7 LLLLLLLL	7 LLLLLLLL
8 HHHHLLHH	8 HHHLLLLL	8 LLLLLLLH	8 LLLLLLLL
9 HHHHLLLL	9 HHHHHHHH	9 HHHLLLHH	9 LLLLLLLL
10 HHHHLLHH	10 HHHHHHHH	10 HHHLLLHH	10 LLLLLLLL
11 HHHHLLHH	11 HHHHHHHH	11 HHHLLLHH	11 LLLLLLLL
12 HHHHLLHH	12 HHHHHHHH	12 HHHLLLHH	12 LLLLLLLL
13 HHHHLLHH	13 HHHHHHHH	13 HHHLLLHH	13 LLLLLLLL
14 HHHHLLHH	14 HHHHHHHH	14 HHHLLLHH	14 LLLLLLLL
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 LLLLLLLH	0 LLLHHHHH	0 HHHHLLHH	0 HHHHLLHH
1 LLLLLLLH	1 LLLHHHHH	1 HHHHLLHH	1 HHHHLLHH
2 LLLLLLLH	2 LLLHHHHH	2 HHHHLLHH	2 HHHHLLHH
3 LLLLLLLH	3 LLLHHHHH	3 HHHHLLHH	3 HHHHLLHH
4 LLLLLLLH	4 LLLHHHHH	4 HHHHLLHH	4 HHHHLLHH
5 LLLLLLLH	5 LLLHHHHH	5 HHHHLLHH	5 HHHHLLHH
6 LLLLLLLH	6 LLLHHHHH	6 HHHHLLHH	6 HHHHLLHH
7 LLLLLLLH	7 LLLHHHHH	7 HHHHLLLL	7 LLLLLLLH
8 LLLLLLLH	8 LLLHHHHH	8 HHHHHHHH	8 HHHHHHHH
9 LLLLLLLH	9 LLLHHHHH	9 HHHHHHHH	9 HHHHHHHH
10 LLLLLLLH	10 LLLHHHHH	10 HHHHHHHH	10 HHHHHHHH
11 LLLLLLLH	11 LLLHHHHH	11 HHHHHHHH	11 HHHHHHHH
12 LLLLLLLH	12 LLLHHHHH	12 HHHHHHHH	12 HHHHHHHH
13 LLLLLLLH	13 LLLHHHHH	13 HHHHHHHH	13 HHHHHHHH
14 LLLLLLLH	14 LLLHHHHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 LLLLLLLH	0 HHHHHHHH	0 HHHHHHHH
1 HHHHHHHH	1 HHHHLLHH	1 HHHHHHHH	1 HHHHHHHH
2 HHHHHHHH	2 HHHHLLHH	2 HHHHHHHH	2 HHHHHHHH
3 HHHHHHHH	3 HHHHLLHH	3 HHHHHHHH	3 HHHHHHHH
4 HHHHHHHH	4 HHHHLLHH	4 HHHHHHHH	4 HHHHHHHH
5 HHHHHHHH	5 HHHHLLHH	5 HHHHHHHH	5 HHHHHHHH
6 HHHHHHHH	6 HHHHLLHH	6 HHHHHHHH	6 HHHHHHHH
7 LLLLLLLL	7 HHHHLLHH	7 LLLLLLLL	7 LLLLLLLL
8 HHHHHHHH	8 HHHHLLHH	8 HHHHLLHH	8 HHLHHHHH
9 HHHHHHHH	9 HHHHLLHH	9 HHHHLLHH	9 HHLHHHHH
10 HHHHHHHH	10 LLLLLLLH	10 HHHHLLHH	10 HHLHHHHH
11 HHHHHHHH	11 HHHHLLHH	11 HHHHLLHH	11 HHLHHHHH
12 HHHHHHHH	12 HHHHLLHH	12 HHHHHHHH	12 HHHHHHHH
13 HHHHHHHH	13 HHHHLLHH	13 HHHHHHHH	13 HHHHHHHH
14 HHHHHHHH	14 HHHHLLHH	14 HHHHHHHH	14 HHHHHHHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHH	0 HHHLLLHH	0 HHHHLLHH	0 LLLLLLLH
1 HHHHHHHH	1 HHHLLLHH	1 HHHHLLHH	1 HHHHLLHH
2 HHHHHHHH	2 HHHLLLHH	2 HHHHLLHH	2 HHHHLLHH
3 HHHHHHHH	3 HHHLLLHH	3 HHHHLLHH	3 HHHHLLHH
4 HHHHHHHH	4 HHHLLLHH	4 HHHHLLHH	4 HHHHLLHH
5 HHHHHHHH	5 HHHLLLHH	5 HHHHLLHH	5 LLLLLLLH
6 HHHHHHHH	6 LLLLLLLL	6 LLLLLLLL	6 HHHHLLHH
7 LLLLLLLL	7 LLLLLLLL	7 LLLLLLLL	7 HHHHLLHH
8 HHLHHLLH	8 LLLLLLLL	8 LLLLLLLL	8 HHHHLLHH
9 HHLHHLLH	9 HHHHLLHH	9 HHHLLLHH	9 HHHHLLHH
10 HHLHHLLH	10 HHHHLLHH	10 HHHLLLHH	10 LLLLLLLH
11 HHLHHLLH	11 HHHHLLHH	11 HHHLLLHH	11 HHHHLLHH
12 HHHHHHHH	12 HHHHLLHH	12 HHHLLLHH	12 HHHHLLHH
13 HHHHHHHH	13 HHHHLLHH	13 HHHLLLHH	13 HHHHLLHH
14 HHHHHHHH	14 HHHHLLHH	14 HHHLLLHH	14 HHHHLLHH
15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH	15 HHHHHHHH

01234567	01234567	01234567	01234567
0 HHHHLLHHH	0 HHHHHHHHH	0 HHHHHHHHH	0 HHHLLLHHH
1 HHHHLLHHH	1 HHHHHHHHH	1 HHHHHHHHH	1 HHHLLLHHH
2 HHHHLLHHH	2 HHHHHHHHH	2 HHHHHHHHH	2 HHHLLLHHH
3 HHHHLLHHH	3 HHHHHHHHH	3 HHHHHHHHH	3 HHHLLLHHH
4 HHHHLLHHH	4 HHHHHHHHH	4 HHHHHHHHH	4 HHHLLLHHH
5 HHHHLLHHH	5 HHHHHHHHH	5 HHHHHHHHH	5 HHHLLLHHH
6 HHHHLLHHH	6 HHHLLLHHH	6 HHHHHHHHH	6 LLLLLLHHH
7 HHHHLLHHH	7 HHHLLLHHH	7 HHHHLLHHH	7 LLLLLLHHH
8 HHHHLLHHH	8 HHHLLLHHH	8 HHHHLLHHH	8 LLLLLLHHH
9 HHHHLLHHH	9 HHHLLLHHH	9 HHHHLLHHH	9 HHHHHHHHH
10 HHHHLLHHH	10 HHHLLLHHH	10 HHHHLLHHH	10 HHHHHHHHH
11 HHHHLLHHH	11 HHHLLLHHH	11 HHHHLLHHH	11 HHHHHHHHH
12 HHHHLLHHH	12 HHHLLLHHH	12 HHHHLLHHH	12 HHHHHHHHH
13 HHHHLLHHH	13 HHHLLLHHH	13 HHHHLLHHH	13 HHHHHHHHH
14 LLLLLLHHH	14 HHHLLLHHH	14 HHHHLLHHH	14 HHHHHHHHH
15 HHHHHHHHH	15 HHHHHHHHH	15 HHHHHHHHH	15 HHHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHHH	0 HHHHLLHHH	0 HHHLLLHHH	0 HHHHHHHHH
1 HHHHHHHHH	1 HHHHLLHHH	1 HHHLLLHHH	1 HHHHHHHHH
2 HHHHHHHHH	2 HHHHLLHHH	2 HHHLLLHHH	2 HHHHHHHHH
3 HHHHHHHHH	3 HHHHLLHHH	3 HHHLLLHHH	3 HHHHHHHHH
4 HHHHHHHHH	4 HHHHLLHHH	4 HHHLLLHHH	4 HHHHHHHHH
5 HHHHHHHHH	5 LLLLLLHHH	5 HHHLLLHHH	5 HHHHHHHHH
6 HHHHHHHHH	6 HHHHLLHHH	6 HHHLLLHHH	6 LLLLLLHHH
7 LLLLLLHHH	7 HHHHLLHHH	7 LLLLLLHHH	7 LLLLLLHHH
8 HHHHLLHHH	8 HHHHLLHHH	8 HHHLLLHHH	8 LLLLLLHHH
9 HHHHLLHHH	9 HHHHLLHHH	9 HHHLLLHHH	9 HHHLLLHHH
10 HHHHLLHHH	10 HHHHLLHHH	10 HHHLLLHHH	10 HHHLLLHHH
11 HHHHLLHHH	11 HHHHLLHHH	11 HHHLLLHHH	11 HHHLLLHHH
12 HHHHLLHHH	12 HHHHLLHHH	12 HHHLLLHHH	12 HHHLLLHHH
13 HHHHLLHHH	13 HHHHLLHHH	13 HHHLLLHHH	13 HHHLLLHHH
14 HHHHLLHHH	14 HHHHLLHHH	14 HHHLLLHHH	14 HHHLLLHHH
15 HHHHHHHHH	15 HHHHHHHHH	15 HHHHHHHHH	15 HHHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHHH	0 LLLLLLHHH	0 HHHHHHHHH	0 HHHHLLHHH
1 HHHHHHHHH	1 HHHHLLHHH	1 HHHHHHHHH	1 HHHHLLHHH
2 HHHHHHHHH	2 HHHHLLHHH	2 HHHHHHHHH	2 HHHHLLHHH
3 HHHHHHHHH	3 HHHHLLHHH	3 HHHHHHHHH	3 HHHHLLHHH
4 HHHHHHHHH	4 HHHHLLHHH	4 HHHHHHHHH	4 HHHHLLHHH
5 LLLLLLHHH	5 HHHHLLHHH	5 HHHHHHHHH	5 LLLLLLHHH
6 LLLLLLHHH	6 HHHHLLHHH	6 HHHHHHHHH	6 HHHHLLHHH
7 LLLLLLHHH	7 HHHHLLHHH	7 HHHHHHHHH	7 HHHHLLHHH
8 LLLLLLHHH	8 HHHHLLHHH	8 HHHHHHHHH	8 HHHHLLHHH
9 LLLLLLHHH	9 HHHHLLHHH	9 HHHHHHHHH	9 LLLLLLHHH
10 LLLLLLHHH	10 HHHHLLHHH	10 LLLLLLHHH	10 HHHHLLHHH
11 LLLLLLHHH	11 HHHHLLHHH	11 LLLLLLHHH	11 HHHHLLHHH
12 LLLLLLHHH	12 HHHHLLHHH	12 LLLLLLHHH	12 HHHHLLHHH
13 LLLLLLHHH	13 HHHHLLHHH	13 LLLLLLHHH	13 HHHHLLHHH
14 LLLLLLHHH	14 HHHHLLHHH	14 LLLLLLHHH	14 HHHHLLHHH
15 HHHHHHHHH	15 HHHHHHHHH	15 HHHHHHHHH	15 HHHHHHHHH
01234567	01234567	01234567	01234567
0 HHHHHHHHH	0 HHLHHHLLH	0 HHHHHHHHH	0 HHHHHHHHH
1 HHHHHHHHH	1 HHLHHHLLH	1 HHHHHHHHH	1 HHHHHHHHH
2 HHHHHHHHH	2 HHLHHHLLH	2 HHHHHHHHH	2 HHHHHHHHH
3 HHHHHHHHH	3 HHLHHHLLH	3 HHHHHHHHH	3 HHHHHHHHH
4 HHHHHHHHH	4 HHLHHHLLH	4 HHHHHHHHH	4 HHHHHHHHH
5 HHHHHHHHH	5 HHLHHHLLH	5 HHHHHHHHH	5 HHHHHHHHH
6 HHHHHHHHH	6 HHLHHHLLH	6 HHHHHHHHH	6 HHHHHHHHH
7 LLLHHHLLH	7 LLLLLLHHH	7 HHHLLLHHH	7 LLLLLLHHH
8 HHHHHHHHH	8 HHHHHHHHH	8 HHHHHHHHH	8 HHLHHHLLH
9 HHHHHHHHH	9 HHHHHHHHH	9 HHHHHHHHH	9 HHLHHHLLH
10 HHHHHHHHH	10 HHHHHHHHH	10 HHHHHHHHH	10 HHLHHHLLH
11 HHHHHHHHH	11 HHHHHHHHH	11 HHHHHHHHH	11 HHLHHHLLH
12 HHHHHHHHH	12 HHHHHHHHH	12 HHHHHHHHH	12 HHLHHHLLH
13 HHHHHHHHH	13 HHHHHHHHH	13 HHHHHHHHH	13 HHLHHHLLH
14 HHHHHHHHH	14 HHHHHHHHH	14 HHHHHHHHH	14 HHLHHHLLH
15 HHHHHHHHH	15 HHHHHHHHH	15 HHHHHHHHH	15 HHHHHHHHH

G;GGGGG;GGGGGGGGGGGGGGGGGG

000-003	S	BHHHLLHHHMF	BHHHLLHHHMF	BHHHLLHHHMF	BHHHLLHHHMF
004-007		BHHHLLHHHMF	BLLLLLHHHMF	BHHHLLHHHMF	BHHHLLHHHMF
008-011		BHHHLLHHHMF	BLLLLLHHHMF	BHHHLLHHHMF	BHHHLLHHHMF
012-015		BHHHLLHHHMF	BHHHLLHHHMF	BHHHLLHHHMF	BHHHLLHHHMF
016-019		BHHHLLHHHMF	BHHHLLHHHMF	BHHHLLHHHMF	BHHHLLHHHMF
020-023		BHHHLLHHHMF	BHHHLLHHHMF	BLLLLLHHHMF	BLLLLLHHHMF
024-027		BLLLLLHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
028-031		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
032-035		BHHHLLHHHMF	BHHHLLHHHMF	BHHHLLHHHMF	BHHHLLHHHMF
036-039		BHHHLLHHHMF	BHHHLLHHHMF	BHHLLLHLLLF	BLLLLLHLLLF
040-043		BHHHLLHLLF	BHHHLLHHHMF	BHHHLLHHHMF	BHHHLLHHHMF
044-047		BHHHLLHHHMF	BHHHLLHHHMF	BHHHLLHHHMF	BHHHHHHHHMF
048-051		BLLLLLHLLLF	BLLLLLHLLLF	BLLLLLHLLLF	BLLLLLHLLLF
052-055		BLLLLLHLLLF	BLLLLLHLLLF	BLLLLLHLLLF	BLLLLLHLLLF
056-059		BLLLLLHLLLF	BLLLLLHLLLF	BLLLLLHLLLF	BLLLLLHLLLF
060-063		BLLLLLHLLLF	BLLLLLHLLLF	BLLLLLHLLLF	BHHHHHHHHMF
064-067		BHHHLLHLLLF	BHHHLLHLLLF	BHHHLLHLLLF	BHHHLLHLLLF
068-071		BHHHLLHLLLF	BHHHLLHLLLF	BHHHLLHLLLF	BHHHLLHLLLF
072-075		BHHHLLHLLLF	BHHHLLHLLLF	BHHHLLHLLLF	BHHHLLHLLLF
076-079		BHHHLLHLLLF	BHHHLLHLLLF	BHHHLLHLLLF	BHHHHHHHHMF
080-083		BHHHHHLLLF	BHHHHHLLLF	BHHHHHLLLF	BHHHHHLLLF
084-087		BHHHHHLLLF	BHHHHHLLLF	BHHHHHLLLF	BHHHHHLLLF
088-091		BHHHHHLLLF	BHHHHHLLLF	BHHHHHLLLF	BHHHHHLLLF
092-095		BHHHHHLLLF	BHHHHHLLLF	BHHHHHLLLF	BHHHHHHHHMF
096-099		BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF
100-103		BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF	BLLLLLHHHMF
104-107		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
108-111		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
112-115		BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF
116-119		BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF	BHHHLLHLLF
120-123		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
124-127		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
128-131		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
132-135		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BLLLLLHLLLF
136-139		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
140-143		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
144-147		BHHHLLHLLLF	BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF
148-151		BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF
152-155		BHHHLHHHMF	BHHHLHHHMF	BHHLLLHLLF	BHHHLHHHMF
156-159		BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF	BHHHHHHHHMF
160-163		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
164-167		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BLLLLLHLLLF
168-171		BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF
172-175		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
176-179		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
180-183		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BLLLLLHLLLF
184-187		BHHHHHLLHF	BHHHHHLLHF	BHHHHHLLHF	BHHHHHLLHF
188-191		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
192-195		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
196-199		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BLLLLLHLLLF
200-203		BHHHLHLLHF	BHHHLHLLHF	BHHHLHLLHF	BHHHLHLLHF
204-207		BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF	BHHHHHHHHMF
208-211		BHHHLLHHHMF	BHHLLHLLHF	BHHLLHLLHF	BHHHLLHHHMF
212-215		BHHHLLHHHMF	BHHLLHLLHF	BLLLLLHLLLF	BLLLLLHLLLF
216-219		BLLLLLHLLLF	BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF
220-223		BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF	BHHHHHHHHMF
224-227		BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF
228-231		BHHHLHHHMF	BHHHLHHHMF	BLLLLLHLLLF	BLLLLLHLLLF
232-235		BLLLLLHLLLF	BHHLLHLLHF	BHHLLHLLHF	BHHLLHLLHF
236-239		BHHHLLHHHMF	BHHLLHLLHF	BHHLLHLLHF	BHHHHHHHHMF
240-243		BHHHLLHLLLF	BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF
244-247		BHHHLHHHMF	BHHHLHLLLF	BHHHLHHHMF	BHHHLHHHMF
248-251		BHHHLHHHMF	BHHHLHHHMF	BHHHLHLLLF	BHHHLHHHMF
252-255		BHHHLHHHMF	BHHHLHHHMF	BHHHLHHHMF	BHHHHHHHHMF

256-259	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF
260-263	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF
264-267	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF
268-271	0HHHLHHHMF	0HHHLHHHMF	0HHHLHLLLF	0HHHHHHHMF
272-275	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF
276-279	0HHHHHHHMF	0HHHHHHHMF	0LLLLLHMF	0LLLLLHMF
280-283	0LLLLLHMF	0HHLLHMF	0HHLLHMF	0HHLLHMF
284-287	0HHLLHMF	0HHLLHMF	0HHLLHMF	0HHHHHHHMF
288-291	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF
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296-299	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF
300-303	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF	0HHHHHHHMF
304-307	0HHLLHMF	0HHLLHMF	0HHLLHMF	0HHLLHMF
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320-323	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF
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328-331	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF
332-335	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF	0HHHHHHHMF
336-339	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF
340-343	0HHHLHHHMF	0HHHLHMF	0HHHLHHHMF	0HHHLHHHMF
344-347	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF
348-351	0HHHLHHHMF	0HHHLHHHMF	0HHHLHHHMF	0HHHHHHHMF
352-355	0HHLLHMF	0HHLLHMF	0HHLLHMF	0HHLLHMF
356-359	0HHLLHMF	0HHLLHMF	0LLLLLHMF	0LLLLLHMF
360-363	0LLLLLHMF	0HHLLHMF	0HHLLHMF	0HHLLHMF
364-367	0HHLLHMF	0HHLLHMF	0HHLLHMF	0HHHHHHHMF
368-371	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF
372-375	0HHHHHHHMF	0HHHHHHHMF	0HHLLHMF	0HHLLHMF
376-379	0HHLLHMF	0HHLLHMF	0HHLLHMF	0HHLLHMF
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384-387	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF
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392-395	0LLLLLHMF	0LLLLLHMF	0LLLLLHMF	0LLLLLHMF
396-399	0LLLLLHMF	0LLLLLHMF	0LLLLLHMF	0HHHHHHHMF
400-403	0HHHLHMF	0HHHLHMF	0HHHLHMF	0HHHLHMF
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440-443	0HHHLHMF	0HHHLHMF	0HHHLHMF	0HHHLHMF
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456-459	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF
460-463	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF
464-467	0HLHHHMF	0HLHHHMF	0HLHHHMF	0HLHHHMF
468-471	0HLHHHMF	0HLHHHMF	0HLHHHMF	0LLLLLHMF
472-475	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF
476-479	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF
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484-487	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF	0HHLLHMF
488-491	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF
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496-499	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF
500-503	0HHHHHHHMF	0HHHHHHHMF	0HHHHHHHMF	0LLLLLHMF
504-507	0HLHHHMF	0HLHHHMF	0HLHHHMF	0HLHHHMF
508-511	0HLHHHMF	0HLHHHMF	0HLHHHMF	0HHHHHHHMF E

[illegible]

[illegible]

G-19

260-263	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHLF	BHHHHHHHLF
264-267	BHHHHHHHLF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
268-271	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
272-275	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
276-279	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHLF	BHHHHHHHLF
280-283	BHHHHHHHLF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
284-287	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
288-291	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
292-295	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHLF
296-299	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
300-303	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
304-307	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
308-311	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHLF	BHHHHHHHLF
312-315	BHHHHHHHLF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
316-319	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
320-323	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
324-327	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHLF	BHHHHHHHLF
328-331	BHHHHHHHLF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
332-335	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
336-339	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
340-343	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHLF
344-347	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
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360-363	BHHHHHHHLF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
364-367	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
368-371	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
372-375	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHLF
376-379	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
380-383	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
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404-407	BHHHHHHHHF	BHHHHHHHLF	BHHHHHHHHF	BHHHHHHHHF
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416-419	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
420-423	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
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432-435	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
436-439	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHLF	BHHHHHHHLF
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464-467	BHHHHHHHLF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
468-471	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHLF
472-475	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
476-479	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
480-483	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
484-487	BHHHHHHHHF	BHHHHHHHLF	BHHHHHHHHF	BHHHHHHHHF
488-491	BHHHHHHHHF	BHHHHHHHLF	BHHHHHHHHF	BHHHHHHHHF
492-495	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
496-499	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
500-503	BHHHHHHHHF	BHHHHHHHLF	BHHHHHHHHF	BHHHHHHHLF
504-507	BHHHHHHHHF	BHHHHHHHLF	BHHHHHHHHF	BHHHHHHHHF
508-511	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF E



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